

2019

Risk Report  
KBC Group



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Dear Reader,

2019 turned out to be a year of challenges for KBC. We had to come up with solutions to deal with far-reaching regulations, new financial players, rapid digitalisation, persistently low interest rates and external factors like Brexit, without being distracted from our main task of helping our clients achieve their dreams and meeting the needs of society. At the same time, further important steps were taken on the sustainability and environment fronts, which you can read about throughout the 2019 Annual Report of KBC Group.

And then we were confronted with the outbreak and spread of coronavirus, which quickly made society's priorities very clear. As an employer and service provider, KBC is doing everything in its power to safeguard the health of its staff and clients, while ensuring that services continue to be provided as usual. We are doing our bit to limit the spread of the virus by allowing as many staff as possible to work from home and by providing clients with advice through a wide range of phone and digital channels. Meanwhile, it is clear that the coronavirus crisis is also having an enormous impact on the economy. At present, we are currently working with the government and other stakeholders to see how we can help deal with the matter at hand. Because, regardless of how the situation pans out, we will continue assuming our responsibility towards society.

Johan Thijs

Chief Executive Officer

Thomas Leysen

Chairman of the Board of Directors

# Introduction: Highlights in 2019, Risk Statement & Disclosure Policy

KBC is an integrated bank-insurance group, whose main focus is on retail clients and small and medium-sized enterprises. We occupy leading positions in our home markets of Belgium, Central and Eastern Europe and Ireland, where we specialise in retail bank-insurance and asset management activities. Elsewhere around the world, the group has established a presence in selected countries and regions.

## Highlights in 2019

- Common equity tier-1 ratio (Basel III fully loaded based on Danish compromise) of 17.15% at year-end, well above the regulatory minimum requirement of 11.55% (incl. Pillar 2 Guidance);
- Fully loaded Basel III leverage ratio of 6.8% at year-end 2019;
- At year-end 2019, the MREL ratio based on the 'hybrid view' definition of SRB amounted to 10.4% as a % of total liabilities and own funds (TLOF). On this basis, the SRB/NBB requires KBC Group NV to achieve a MREL ratio of 9.67% as a percentage of TLOF as from 31-12-2021 onwards;
- The portfolio of outstanding loans amounted to 175 billion euros, 95.3% of which granted in Europe. Overall impaired loan ratio of 3.5%, with impairment charges accounting for 0.12% of the portfolio of outstanding loans;
- Continued robust liquidity position at year-end, with NSFR at 136% and LCR at 138% (i.e. 12-month average LCR). Both ratios are well above the minimum regulatory requirements;
- Solvency II ratio of 202% at group level (including volatility adjustment), ranking KBC Insurance among the better-capitalised companies in the insurance industry;
- Underpinning of risk appetite in place for the different risk types.

## Risk statement

As we are mainly active in banking, insurance and asset management, we are exposed to a number of typical risks for these financial sectors, such as – but not limited to – credit default risk, counterparty credit risk, concentration risk, movements in interest rates, currency risk, market risk, liquidity and funding risk, insurance underwriting risk, changes in regulations, operational risk, customer litigation, and competition from other and new players, as well as the economy in general. KBC closely monitors and manages each of these risks within a strict risk framework, but they may all have a negative impact on asset values or could generate additional charges beyond anticipated levels.

At present, a number of factors are considered to constitute the main challenges for the financial sector. These relate to recent macroeconomic and geopolitical developments, such as the Iran-US conflict, Brexit-linked negotiations, and Chinese growth deceleration combined with the uncertainty regarding the spreading of the coronavirus. Regulatory risk remains a dominant theme for the sector, as does enhanced consumer protection. Digitalisation (with technology and Artificial Intelligence as catalysts) presents both opportunities and threats to the business model of traditional financial

institutions. Climate-related changes also evoke new risks, not only for the financial sector but also for its clients. Finally, cyber risk has become one of the main threats during the past few years, not just for the financial sector, but for the economy as a whole.

## Disclosure policy

In line with its general communication policy, KBC aims to be as open as possible when communicating to the market about its exposure to risk. Risk management information is therefore provided in a separate section of the 2019 Annual Report of KBC Group NV and – more extensively – in this publication.

The most important regulations governing risk and capital management are the Basel III capital requirements applying to banking entities, and the Solvency II capital framework applying to insurance entities. In 2014, the Basel II capital requirements were replaced by the Basel III framework, which is gradually entering into effect with a final implementation date of 1 January 2020. Solvency I has been replaced by the fundamentally reformed Solvency II framework, which officially entered into force in January 2016.

The 2019 Risk Report is based on Basel III's third pillar and the resulting disclosure requirements of the Capital Requirements Regulation. Requirements relating to activities that are not applicable/do not exist for KBC are, therefore, not included. Although the disclosures mostly refer to the Basel III first-pillar risk metrics and focus on banking entities, KBC – as a bank-insurance company – has decided to extend the scope to include the insurance activities in order to provide an overall view of the KBC group's risk exposure and risk management activities.

To ensure that a comprehensive view is provided, the market risk (non-trading-related, i.e. Asset and Liability Management) inherent in KBC Insurance's activities have also been included. Furthermore, as they are managed in an overarching group-wide fashion, the disclosures on non-financial risks have been drawn up to include detailed information at KBC group level (banking and insurance combined). Furthermore, liquidity risk is described from a group perspective. Detailed information on the technical insurance risk borne by KBC Insurance has also been included.

Information is disclosed at the highest consolidated level, i.e. KBC Group. Hence, unless explicitly otherwise mentioned, all references to KBC in this report refer to KBC Group Consolidated. Additional information, specifically on the material entities, is confined to the capital information in the 'Capital adequacy' section. For more detailed information, please refer to the local capital disclosures of the entity concerned (for instance, those provided on their websites).

KBC ensures that a representative picture is given in its disclosures at all times. The scope of the reported information – which can differ according to the matter being dealt with – is clearly indicated. A comparison with the previous year is provided unless this is not possible due to differences in scope and/or methodology.

The information provided in this document has not been subject to an external audit. However, the disclosures have been checked for consistency with other existing risk reports and underwent a final screening by authorised risk management representatives to ensure quality.

In addition, the 2019 Risk Report was distributed to the Group Executive Committee, the Board of Directors, as well as to the Risk & Compliance Committee to ensure the appropriate approval of the management body as requested under Basel III.

Information disclosed under IFRS 7, which has been audited, is presented in KBC's annual report. Broadly speaking, the information in the annual report corresponds with the information in this risk report, but a one-on-one comparison cannot always be made due to the different risk concepts used under IFRS and Basel III. In order not to compromise on the readability of this document, relevant parts of the annual report have been reproduced here.



This risk report is available in English on the KBC website and is updated on a yearly basis. KBC's next update is scheduled for the beginning of April 2021. Depending on regulatory requirements, KBC may provide more frequent updates.

## Cross-references

For a number of topics, we refer to other reports in order to avoid too much overlap or duplication of information. This allows us to improve the readability of and to add value to the report.

The table below shows the topics where reference is made to other reports.

Topics	Reports
Information regarding governance arrangements	See the 'Corporate governance statement' section of the 2019 Annual Report of KBC Group NV
Information on the remuneration policy of financial institutions and corporate governance arrangements	KBC Group Compensation Report See the 'Corporate governance statement' section of the 2019 Annual Report of KBC Group NV
Country-by-country information	See the 'Our business units' section and the 'Our business model' strategy section of the 2019 Annual Report of KBC Group NV
New products	See 'In what environment do we operate?' in the 'Our business model' section and the 'Our business units' section of the 2019 Annual Report of KBC Group NV
Credit risk related to KBC Insurance	See the 'How do we manage our risks' section of the 2019 Annual Report of KBC Group NV
Information regarding corporate sustainability and climate change	See 'Sustainability Report' on the kbc.com website and the 'Focus on climate' section of the 2019 Annual Report of KBC Group NV

# Risk Management Governance

## Risk Management Governance

Main elements in our risk governance model:

- The Board of Directors (BoD), assisted by the Risk & Compliance Committee (RCC), which decides on and supervises the risk appetite – including the risk strategy – each year. It is also responsible for the development of a sound and consistent group-wide risk culture, based on a full understanding of the risks the group faces and how they are managed, taking into account the group risk appetite;
- The Executive Committee – supported by activity-based risk committees – which is the senior management level committee responsible for integrating risk management with risk appetite, strategy and performance goal setting;
- The CRO Services Management Committee and activity-based risk committees mandated by the Executive Committee;
- Risk-aware business people who act as the first line of defence for conducting sound risk management in the group;
- A single, independent risk function that comprises the Group Chief Risk Officer (Group CRO), local CROs, local risk functions and the group risk function. The risk function acts as (part of) the second line of defence, while Internal Audit is the third line.

Relevant risk management bodies and control functions:

- Executive Committee:
  - makes proposals to the Board of Directors about risk appetite – including risk strategy – and the general concept of the risk management framework;
  - decides on the integrated and risk-type-specific risk management frameworks and monitors their implementation throughout the group;
  - acts as the leading risk committee, covering material issues that are channelled via the specific risk committees or the Group Assets & Liabilities Committee (Group ALCO);
  - monitors the group's major risk exposure to ensure conformity with the risk appetite.
- Group ALCO:
  - is a business committee that assists the Executive Committee in the domain of (integrated) balance sheet management at group level. It handles matters related to ALM and liquidity risk.
- Risk committees:
  - The CRO Services Management Committee supports the Executive Committee in assessing the adequacy of, and compliance with, the KBC Risk Management Framework and defines and implements the vision, mission and strategy for the CRO Services of the KBC group. The CRO Services Management Committee convened on nine occasions during 2019;
  - The activity-based Group Risk Committees (for lending, markets and insurance, respectively) support the Executive Committee in setting and monitoring limits for these activities at group level. Liquidity and ALM issues related to these activities are addressed by the Group ALCO. The ALCO convened on nine occasions during 2019;

- The Group Internal Control Committee (GICC) supports the Executive Committee in monitoring and strengthening the quality and effectiveness of KBC's internal control system. The GICC convened on five occasions during 2019.

In order to strengthen the voice of the risk function and to ensure that the decision-making bodies of the business entities are appropriately challenged on matters of risk management and receive expert advice, KBC has deployed independent **Chief Risk Officers (CROs)** throughout the group according to a logical segmentation based on entity and/or business unit. Close collaboration with the business is assured since they take part in the local decision-making process and, if necessary, can exercise a right of veto. Independence of the CROs is achieved through a direct reporting line to the Group CRO. For each main risk type, a Risk Competence Centre has been established at group level. Most of these competence centres are extended virtual teams made up of group and local experts working together.

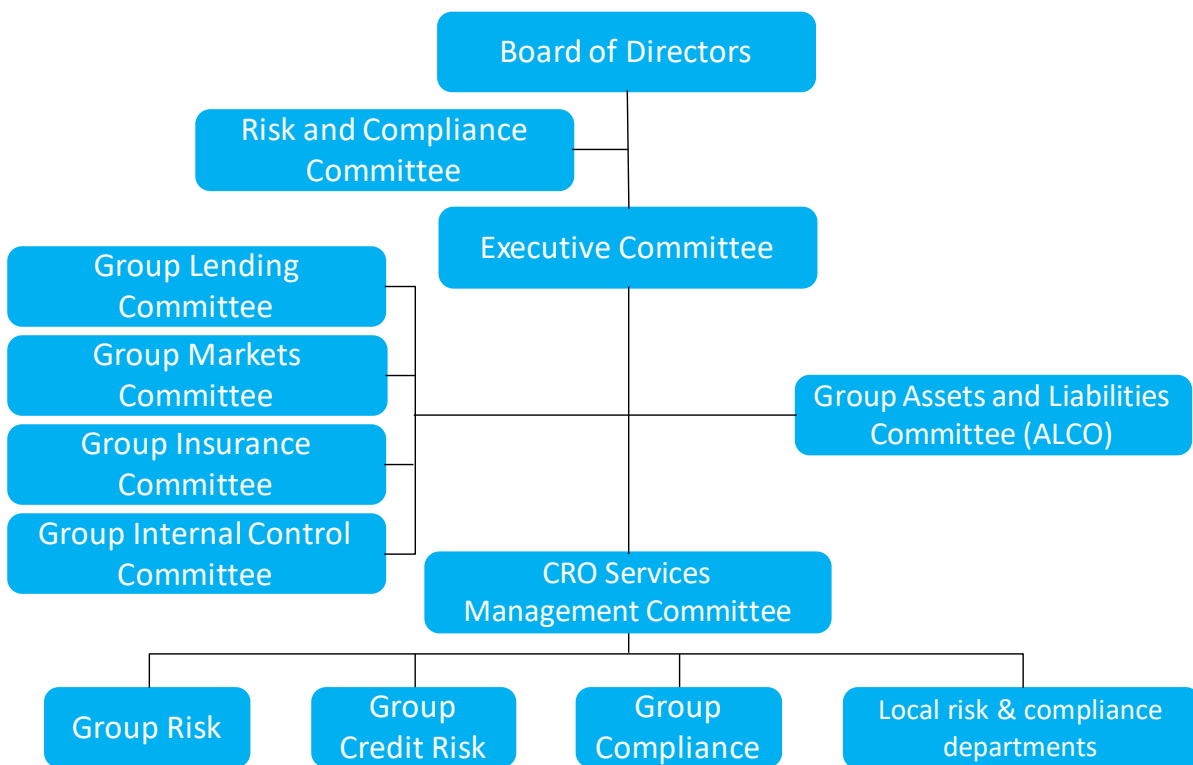


Figure 1 - Schematic overview of risk governance model

## Risk culture



*Christine Van Rijseghem, KBC Group CRO*

Risk culture is a combination of shared values and norms that shape behaviours and mindsets when managing risks within an institution. KBC fosters a positive risk culture within its entire organisation that adheres to high risk standards and sound risk management. It is the aim of KBC to create an environment where risk is on the agenda of all employees, and where commercial decisions at all levels are made with clients' interest in mind, in a risk-aware manner.

In order to support this goal, risk officers work together with the business on a daily basis, inspiring, equipping and challenging them to excel in managing the risk/return balance of their activities. This applies to business-as-usual, as well as to new business projects or experiments.

Given KBC's strategy, these new business projects tend to be related to digitalisation, artificial intelligence, various types of automation and application of models. It is the Company's intention not to miss any commercial opportunity or risks offered by these new trends. Agile, everyday cooperation of business and risk units is a key prerequisite of success in this matter.

Climate-related changes also create new risks for KBC and its clients. Risks stemming from physical climate changes, such as increased floods and hailstorms, as well as the transition to a low-carbon economy are actively confronted by KBC's Risk and Business departments. We both actively monitor the environmental footprint of our own activities and have begun to manage the environmental impact of our lending, investment and insurance portfolios. This new risk is being integrated into existing frameworks and policies in line with new rules and regulations leading KBC and its clients towards a low-carbon economy.

An effective risk culture involves awareness of new risks and alertness when it comes to responding adequately to them.

## Three Lines of Defence Model (3 LOD model)

The three lines of defence concept is used to further improve the Internal Control System within the KBC group. The roles and responsibilities of the different parties within this concept are highlighted below.

### First line of defence: business entities

The first line of defence (the business side) takes full responsibility for its risks, having to deal with them and putting the necessary controls in place. This involves allocating sufficient priority and capacity to risk topics, making sure that the quality of self-assessments is adequate, and performing the right controls in the right manner.

## Second line of defence: the risk function (and other parties, such as the compliance function)

The risk function, as part of the second line of defence, formulates independent opinions on the risks KBC faces and on the way they are mitigated.

To do this consistently while adhering to high standards, the risk function develops, imposes and monitors consistent implementation of methods or frameworks and tools to identify, measure and report on risks.

To make sure that its voice is heard, the risk function also has a veto right that can be exercised in the different committees where major decisions are taken.

## Third line of defence: internal audit

The third line of defence (internal audit) gives assurances to the Boards of Directors that the overall internal control environment is effective and that policies and processes are in place, effective and consistently applied throughout the group.

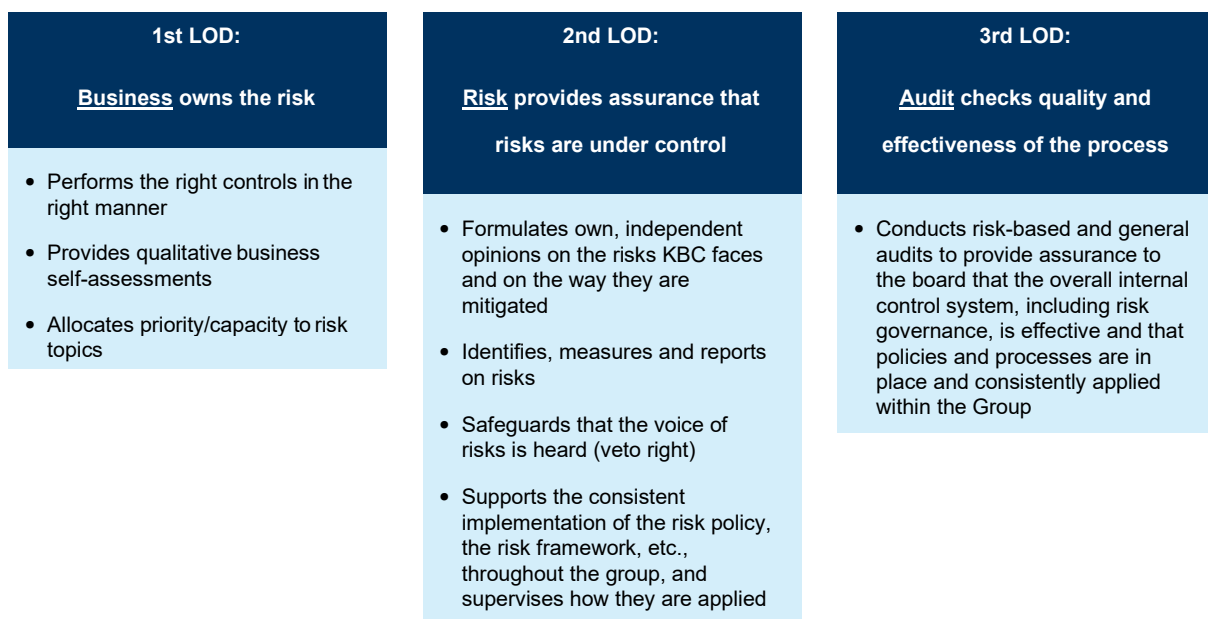


Figure 2 - Overview 3 lines of defence

## Risk measurement standards

Risk measurement is an important step in the risk management process, as it aims to measure the various risks that KBC is exposed to. However, 'measuring risk' can be challenging, given that it typically requires analysing a large amount of data, developing (complex) mathematical models and bringing it all together in time-critical calculation and reporting processes. Unsurprisingly, this in itself can lead to new risks.

## Definition

KBC defines risk measurement as 'the action to come to a quantitative expression of a risk, or a combination of risks, on a portfolio of instruments/exposures via a model'. Once risks have been identified, certain attributes of the risk type in question can be assessed, e.g., impact, probability of occurrence, size of exposure, etc. This is done with the help of risk measures. These measures allow risks to be monitored over time and help to assess the impact of risk management actions. Risk measures are designed to measure a specific risk or multiple risks at the same time and can be either internally developed or imposed by the regulator (including the calculation method used). An overview of the risk measures in use in the KBC group (both regulatory and internally defined) is provided in the integrated and risk-type specific frameworks.

## Standards

Due to the crucial importance of risk measurement, strict guidelines apply for the design, development and use of risk measurement standards. All requirements that relate to these processes are documented in the KBC Risk Measurement Standards (RMS).

They aim to install a robust challenger process, creating awareness regarding measurement risk and mitigating this risk where possible, without putting undue burden on the company. Hence, implementing the risk measurement standards ensures that:

- the output of the risk measurement process is of good quality and fit for use;
- the measurement process itself is stable/robust, efficient and cost-effective.

In order to arrive at sound measurements that facilitate decision processes, the following principles play a key role in the RMS:

- **Transparency:** provide stakeholders with a clear view of all aspects relevant to measuring risk, including any shortcomings and errors;
- **Four-eyes principle:** have a second pair of eyes to ensure stakeholders have sufficient confidence in the adequacy of the measurement (i.e. does it adequately reflect the underlying risk) so that the measurement outcome can be used with full confidence for reporting/steering. For certain measures, such as those for measuring required capital, a validation (= more stringent form of verification) is performed by a member of an independent validation unit;
- **Materiality:** measures can exclude information or contain imperfections if this does not affect the decision-making process, meaning that management would not come to a different conclusion if the information was included or the imperfection was remedied.

The standards with regard to the organisation, processes and policies necessary for achieving and maintaining data quality in a structured and efficient way are described in a separate KBC Data Management Framework owned by KBC's Data Quality Management department.

## KBC Model Risk Management Standards

Like many other financial institutions, KBC Group, relies increasingly on advanced mathematical, statistical and numerical models to support decision making, measure and manage risk, manage businesses and streamline processes. As the use of the models increases, so does the importance of recognising, understanding and mitigating risks related to the design, implementation or use of models, in order to protect both KBC and its clients.

The CRO Services Management Committee of January 2020 approved KBC's model risk management standards, establishing a framework that allows to identify, understand and efficiently manage model risk, similarly to any other risk type.

## Risk appetite

The overall management responsibility of a financial institution can be defined as managing capital, liquidity, return (income versus costs) and risks, which in particular arise from the special situation of banks and insurers as risk transformers. Taking risks and transforming risks is an integral part – and hence an inevitable consequence of – the business of a financial institution. Therefore, KBC does not aim to eliminate all the risks involved (risk avoidance) but instead looks to identify, control and manage them in order to make optimal use of its available capital (i.e. risk-taking as a means of creating value).

How much risk KBC is prepared to assume and its tolerance for risk is captured in the notion of 'risk appetite'. It is a key instrument in the overall (risk) management function of KBC, as it helps us to better understand and manage risks by explicitly expressing – both qualitatively and quantitatively – how much and what kind of risk we want to take.

The ability to accept risk (also referred to as risk-taking capacity) is limited both by financial constraints (available capital, liquidity profile, etc.) and non-financial constraints (regulations, laws, etc.), whereas the willingness to accept risk depends on the interests of the various stakeholders (shareholders, creditors, employees, management, regulators, clients, etc.). A key component in defining risk appetite is therefore an understanding of the organisation's key stakeholders and their expectations.

Risk appetite within KBC is set out in a 'risk appetite statement', which is produced at both group and local level. The Risk Appetite Statement (RAS) reflects the view of the Board of Directors and top management on risk taking in general, and on the acceptable level and composition of risks that ensure coherence with the desired return. The statement is built on risk appetite objectives that are directly linked to corporate strategy and provides a qualitative description of KBC's playing field. These high-level risk appetite objectives are further specified in qualitative and quantitative statements for each of the different risk types.

The layered nature of the risk appetite statement is illustrated as follows:

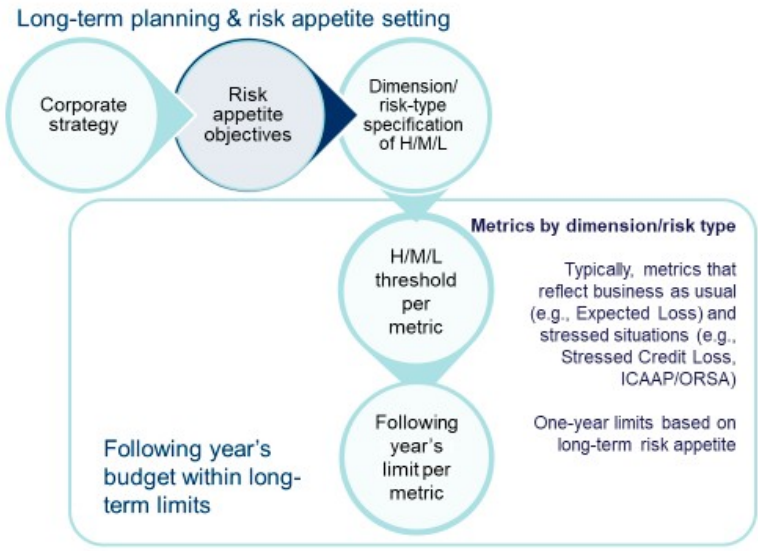


Figure 3 - Schematic overview of risk appetite statement

The long-term risk appetite is specified as High (H), Medium (M) or Low (L) based on the metrics and thresholds stipulated in the 'risk appetite underpinning exercise' performed for the main risk types. Lastly, risk appetite is translated into risk-type-specific group limits/targets, which are further cascaded down to the entities.

For KBC, this translates into the following long-term risk appetite per risk type:

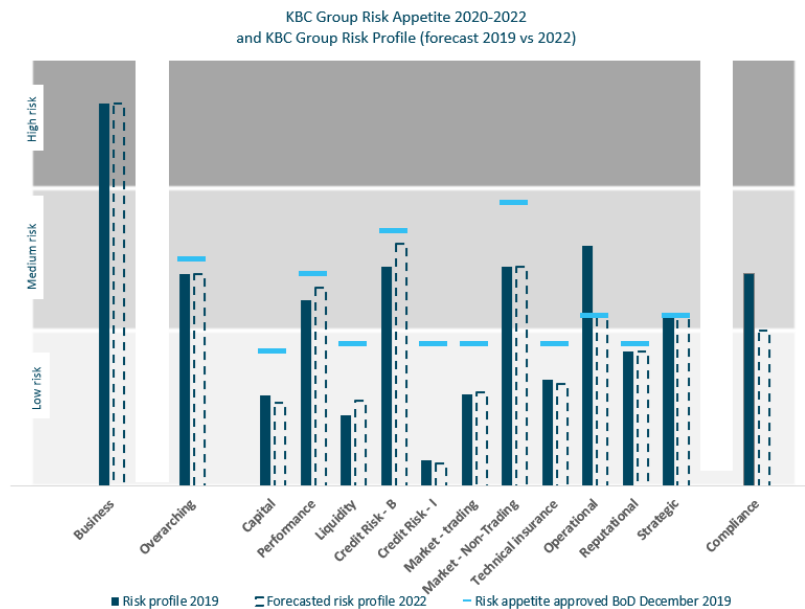


Figure 4 - Overview of risk appetite per risk type

The actual and forecast overarching risk profile remains comfortably within the risk appetite for the next three years. KBC aims to further reduce the overall operational risk profile and compliance risk profile.



# Capital Adequacy

Capital Management is a key management process relating to all decisions on the level and composition of our capital. It aims to achieve the best possible balance between regulatory requirements, rating agencies' views, market expectations and management ambitions.

## Solvency at KBC group level

### Solvency requirements

We report the solvency of the group, the bank and the insurance company based on IFRS data and according to the rules imposed by the regulator. For the KBC group, this implies that we calculate our solvency ratios based on CRR/CRD IV, which has gradually been implemented since 2014 (phasing-in).

The general rule under CRR/CRD IV for insurance participations is that an insurance participation is deducted from common equity at group level, unless the competent authority grants permission to apply a risk weighting instead (Danish compromise). KBC received such permission from the supervisory authority and hence reports its solvency on the basis of a 370% risk weighting being applied to the holdings of own fund instruments of the insurance company (a historical carrying value of 2 469 million euros), after having deconsolidated KBC Insurance from the group figures.

The minimum solvency ratios required under CRR/CRD IV are 4.5% for the common equity tier-1 (or CET1) ratio, 6% for the tier-1 capital ratio and 8% for the total capital ratio (i.e. pillar 1 minimum ratios). In addition, CRR/CRD IV also requires a capital conservation buffer equal to 2.5%. Prompted by the recent Covid-19 pandemic, the ECB announced that banks would temporarily be able to use their capital conservation buffers to finance households and businesses experiencing temporary difficulties.

As a result of its supervisory review and evaluation process (SREP), the competent supervisory authority (in KBC's case, the ECB) can require that higher minimum ratios be maintained (= pillar 2 requirements) because, for instance, not all risks are properly reflected in the regulatory pillar 1 calculations. Following the SREP for 2019, the ECB formally notified KBC of its decision (applicable as from 1 January 2020) to maintain the pillar 2 requirement (P2R) at 1.75% CET1 and the pillar 2 guidance (P2G) at 1% CET1.

The overall capital requirement for KBC is determined not only by the ECB, but also by the decisions of the local competent authorities in its core markets with regard to the countercyclical buffer requirement. When aggregated, that corresponds to a countercyclical buffer at KBC group level of around 0.30% (situation at 27 March 2020).

For Belgian systemic financial institutions, the NBB had already announced its systemic capital buffers at an earlier date. For the KBC group, this means that an additional capital buffer of 1.5% of CET1 is required.

Altogether, this brings the fully loaded CET1 requirement (under the Danish compromise) to 10.55% (4.5% (pillar 1) + 1.75% (P2R) + 2.5% (conservation buffer) + 1.5% (systemic buffer) + 0.30% (countercyclical buffer)), with an additional pillar 2 guidance (P2G) of 1%. The table below summarises the regulatory capital requirement at the level of KBC Group (consolidated).

Regulatory capital requirements KBC Group (consolidated, fully loaded)	2020	2019
Pillar 1 minimum	8.00%	8.00%
of which CET1	4.50%	4.50%
of which Additional Tier-1 instruments	1.50%	1.50%
of which Tier-2 instruments	2.00%	2.00%
Pillar 2 requirement	1.75%	1.75%
Combined Buffer Requirement (CBR)	4.30%	4.45%
of which Capital conservation buffer	2.50%	2.50%
of which Buffer for systemically important institutions (O-SII)	1.50%	1.50%
of which Entity-specific countercyclical buffer	0.30%	0.45%
<b>Overall Capital Requirement (OCR)</b>	<b>14.05%</b>	<b>14.20%</b>
of which CET 1	<b>10.55%</b>	<b>10.70%</b>
of which CET 1 excluding conservation buffer (temporary ECB measure)	<b>8.05%</b>	

Table 1 - Regulatory capital requirements KBC Group (consolidated, fully loaded)

KBC aims to be one of the better capitalised financial institutions in Europe. Each year, therefore, we assess the common equity ratios of a peer group of European banks that are active in the retail, SME, and corporate client segments, and then position ourselves relative to the median fully loaded CET1 ratio of that peer group. We reflect this ambition in an 'own capital target', which amounts to 14% of common equity. On top of this, KBC wants to maintain a flexible additional buffer of common equity for potential add-on mergers and acquisitions in our core markets. Any M&A opportunity will be assessed subject to very strict financial and strategic criteria. Following the acquisition of the remaining 45% stake in ČMSS (Czech Republic) in 2019, the M&A buffer is now 1.7%. This buffer is additional to the 'own capital target' of the KBC group and forms the reference capital position, which stands at 15.7%.

Comment: in line with ECB recommendations, no final dividend will be paid for 2019 (originally it had been planned to pay a final dividend of 2.5 euros per share). The resulting change in the amount of profit for 2019 that has been used to calculate common equity is still subject to the approval of the ECB.

## Solvency figures under CRR/CRDIV

A summary calculation of the KBC group's solvency ratios under the Danish compromise method is given below, including a breakdown of the deductions and filters applicable to KBC. Full details are available in Annex III.

Solvency at group level (consolidated; under CRR/CRD IV, Danish compromise method) (in millions of EUR)	31-12-2019	31-12-2018
<b>Total regulatory capital, after profit appropriation</b>	<b>20 419</b>	<b>18 217</b>
<b>Tier-1 capital</b>	<b>18 489</b>	<b>16 150</b>
<b>Common equity<sup>1</sup></b>	<b>16 989</b>	<b>15 150</b>
Parent shareholders' equity (after deconsolidating KBC Insurance)	17 933	16 992
Intangible fixed assets, incl. deferred tax impact (-)	-726	-584
Goodwill on consolidation, incl. deferred tax impact (-)	-766	-602
Minority interests	0	0
Hedging reserve, cashflow hedges (-)	1 331	1 263
Valuation differences in financial liabilities at fair value – own credit risk (-)	-9	-14
Value adjustment due to requirements for prudent valuation (-) <sup>2</sup>	-54	-63
Dividend payout (-)	0	-1 040

Coupon on AT1 instruments (-)	-11	-7
Deduction with regard to financing provided to shareholders (-)	-57	-91
Other direct, indirect and synthetic holdings by an institution of own CET1 instruments (negative amount)	0	0
Deduction with regard to irrevocable payment commitments (-)	-45	-32
IRB provision shortfall (-)	-140	-100
Deferred tax assets on losses carried forward (-)	-467	-571
Deferred tax assets arising from temporary difference (amount above 10% threshold) (-)	0	0
<b>Additional going concern capital</b>	<b>1 500</b>	<b>1 000</b>
Grandfathered innovative hybrid tier-1 instruments	0	0
Grandfathered non-innovative hybrid tier-1 instruments	0	0
CRR-compliant AT1 instruments	1 500	1 000
Minority interests to be included in additional going concern capital	0	0
<b>Tier-2 capital</b>	<b>1 930</b>	<b>2 067</b>
IRB provision excess (+)	130	204
Subordinated liabilities issued by KBC Group	1 678	1 682
Subordinated liabilities issued by subsidiaries of KBC Group	122	181
Subordinated loans to non-consolidated financial sector entities (-)	0	0
Minority interests to be included in tier-2 capital	0	0
<b>Total weighted risk volume</b>	<b>99 071</b>	<b>94 875</b>
<b>Banking</b>	<b>89 838</b>	<b>85 474</b>
Credit risk	75 786	71 224
IRB Advanced approach	62 055	57 930
IRB Foundation approach	2 772	3 121
Standardised approach	6 485	6 215
Counterparty credit risk	3 049	2 630
Other assets	1 425	1 328
Market risk	2 713	3 198
Operational risk	11 340	11 051
<b>Insurance</b>	<b>9 133</b>	<b>9 133</b>
Holding-company activities	124	302
Elimination of intercompany transactions	-25	-34
<b>Solvency ratios</b>		
Common equity ratio (or CET1 ratio) <sup>3</sup>	17.1%	16.0%
Tier-1 ratio	18.7%	17.0%
Total capital ratio	20.6%	19.2%

1. Audited figures (excluding 'IRB provision shortfall' and 'Value adjustment due to requirements for prudent valuation').

2. CRR ensures that prudent valuation is reflected in the calculation of available capital. This means that the fair value of all assets measured at fair value and impacting the available capital (by means of fair value changes in P&L or equity) need to be brought back to their prudent value. The difference between the fair value and the prudent value (also called the 'additional value adjustment' or AVA) must be deducted from the CET1 ratio.

3. See 'Comment' on p. 19.

Table 2 - Solvency at group level (Danish compromise)

Solvency at group level (consolidated; CRR/CRD IV, deduction method, fully loaded) (in millions of EUR)	31-12-2019	31-12-2018
Common equity	16 224	14 199
Total weighted risk volume	94 196	89 537
Common equity ratio	17.2%	15.9%

Table 3 - Solvency at group level (deduction method)

## Maximum Distributable Amount

Distributions (being dividend payments, payments related to additional tier-1 instruments or variable remuneration) are limited in case the combined buffer requirements described above are breached. This limitation is also referred to as 'Maximum Distributable Amount' or 'MDA' thresholds. The table below provides an overview of the buffers KBC has compared to these thresholds, both on an actuals basis (i.e. versus the regulatory targets that apply at the reporting date) and a fully loaded basis (i.e. versus the regulatory targets that will apply going forward).

Buffer compared to the Overall Capital Requirement (consolidated; under CRR/CRD IV, Danish compromise method)	31-12-2019		31-12-2018	
	Fully loaded	Actual	Fully loaded	Actual
CET1 Pillar 1 minimum	4.50%	4.50%	4.50%	4.50%
Pillar 2 requirement	1.75%	1.75%	1.75%	1.75%
Capital conservation buffer	2.50%	2.50%	2.50%	1.88%
Buffer for systemically important institutions (O-SII)	1.50%	1.50%	1.50%	1.50%
Entity-specific countercyclical buffer	0.30%	0.43%	0.45%	0.24%
Overall Capital Requirement (OCR) - CET1*	10.55%	10.68%	10.70%	9.87%
CET1 used to satisfy shortfall in AT1 bucket	0.00%	0.00%	0.45%	0.45%
CET1 used to satisfy shortfall in T2 bucket	0.05%	0.05%	0.00%	0.00%
CET1 requirement	10.60%	10.74%	11.15%	10.32%
CET1 capital	16 989	16 989	15 150	15 150
CET1 buffer (= buffer to MDA)	6 486	6 353	4 575	5 363

\* Situation as at 27 March 2020. No account has been taken of changes that were announced after that date.

Table 4 - Buffer compared to the Overall Capital Requirement

## Solvency figures under the FICOD

In addition to the solvency ratios under CRD IV, KBC – as a financial conglomerate – also has to disclose its solvency position as calculated in accordance with the Financial Conglomerate Directive (FICOD; 2002/87/EC). In line with this directive, available capital is calculated on the basis of the consolidated position of the group and the eligible items recognised as such under the prevailing sectoral rules, which are CRD IV for the banking business and Solvency II for the insurance business. The resulting available capital is to be compared with a capital requirement expressed as a risk-weighted asset amount. For this latter figure, the capital requirements for the insurance business (based on Solvency II) are multiplied by 12.5 to obtain a risk-weighted asset equivalent (instead of the 370% risk weighting applied to the participation in the insurance company under the Danish compromise).

Solvency at group level (consolidated; FICOD method) (in millions of EUR)	31-12-2019	31-12-2018
	Fully loaded	Fully loaded
Common equity	17 651	15 885
Total weighted risk volume	111 526	106 380
Common equity ratio	15.8%	14.9%

Table 5 - Solvency at group level (consolidated; FICOD method)

## Leverage ratio

CRR/CRD IV requires credit institutions to calculate, report and monitor their leverage ratios. The leverage ratio is a supplementary, non-risk-based measure to contain the build-up of leverage (i.e. create a backstop on the degree to which a banking firm can leverage its capital base). It is calculated as a percentage of tier-1 capital relative to the total on- and off-balance-sheet exposure (non-risk-weighted).

The leverage ratio is determined and monitored within the quarterly closing process and included in the periodic management reports of the Finance and Credit Risk departments. This monitoring covers both the position of KBC itself (taking our risk appetite into account) as well as benchmarking in terms of relevant peers. All of the above processes are part of KBC's ICAAP (described later in this section).

At year-end 2019, our fully loaded leverage ratio at group level stood at 6.8% (see table below), which is more than double the regulatory requirement (3% applicable as from 28 June 2021). Hence, the leverage ratio is less restrictive for KBC than the risk-based capital ratios.

The year-on-year increase is explained by the higher level of tier-1 capital (mainly retained profits and 500 million euros AT1 issued), only partly offset by a higher exposure amount.

Leverage ratio at group level	31-12-2019	31-12-2018
(consolidated; under CRR/CRD IV, Danish compromise method) (in millions of EUR)	Fully loaded	Fully loaded
Tier-1 capital	18 489	16 150
Total exposure	273 029	266 594
Total assets	290 735	283 808
Deconsolidation of KBC Insurance	-33 243	-31 375
Adjustment for derivatives	-2 882	-3 105
Adjustment for regulatory corrections in determining tier-1 capital	-2 254	-2 043
Adjustment for securities financing transaction exposures	638	408
Off-balance-sheet exposures	20 035	18 900
Leverage ratio	6.8%	6.1%

Table 6 - Leverage ratio at group level

## Minimum requirement for own funds and eligible liabilities (MREL)

Besides the ECB and NBB, which supervise KBC on a going concern basis, KBC is also subject to requirements set by the Single Resolution Board (SRB). The SRB is developing resolution plans for the major banks in the euro area. Such a plan describes how the resolution authorities will approach the resolution of a bank that is failing (or likely to fail) in a way that protects its critical functions, government funds and financial stability. It takes account of the specific features of the bank and is tailor-made. A key feature of the resolution plan is deciding at which level the competent resolution authorities will intervene. A choice has to be made between a single resolution authority that resolves the group as a whole (Single Point of Entry or 'SPE') or different authorities that separately resolve those parts of the group that fall within their jurisdiction (Multiple Point of Entry or 'MPE').

The resolution plan for KBC is based on a Single Point of Entry (SPE) approach at KBC group level, with 'bail-in' as the primary resolution tool. Bail-in implies a recapitalisation and stabilisation of the bank by writing down certain unsecured liabilities or converting them into shares. The SPE approach at group level reflects KBC's business model, which relies heavily on integration, both commercially (e.g., banking and insurance) and operationally (e.g., risk, finance, treasury, IT, etc.). Debt instruments that are positioned for bail-in are issued by KBC Group NV. This approach keeps the group intact in resolution and safeguards the bank-insurance model in going concern.

It is crucial that there are adequate liabilities eligible for bail-in. This is measured by the minimum requirement for own funds and eligible liabilities (MREL). The SRB defines the minimum MREL level for KBC.

The table below provides the MREL as a percentage of Total Liabilities and Own Funds (TLOF), based on the 'consolidated view'. The 'consolidated view' includes own funds and MREL eligible liabilities issued by KBC Group NV (point of entry) and other group entities (including KBC IFIMA). On this basis, the SRB/NBB required KBC Group NV to achieve a MREL ratio of 9.76% as a percentage of TLOF.

<b>MREL: consolidated view</b> (in millions of EUR)	<b>31-12-2019</b>	<b>31-12-2018</b>
Own funds and eligible liabilities	26 979	24 711
CET1 capital (consolidated, CRR/CRD IV, Danish compromise method)	16 989	15 150
AT1 capital (consolidated, CRR/CRD IV)	1 500	1 000
T2 capital (consolidated, CRR/CRD IV)	1 930	2 068
Subordinated liabilities (not included in AT1 & T2)	523	2 022
Senior debt (nominal amount, remaining maturity > 1 year)	6 037	4 473
Total Liabilities and Own Funds (TLOF)	249 850	245 225
MREL as a % of TLOF	10.8%	10.1%

*Table 7 - MREL consolidated view*

In December 2019, the SRB informed KBC that the 9.76% target under the 'consolidated' approach was no longer valid and that it was being replaced by a new target of 9.67% as a percentage of TLOF under the so-called 'hybrid approach'. This approach excludes MREL eligible liabilities that have not been issued by KBC Group NV (insofar as they do not constitute own funds) and requires tier-2 capital downstreamed by KBC Group NV to KBC Insurance to be deducted from MREL (in line with the treatment under CRR/CRD). Given this more restrictive definition of MREL, SRB decided to introduce a transition period, with the new target applying as of 31 December 2021.

<b>MREL: hybrid view</b> (in millions of EUR)	<b>31-12-2019</b>	<b>31-12-2018</b>
Own funds and eligible liabilities	25 944	23 637
CET1 capital (consolidated, CRR/CRD IV, Danish compromise method)	16 989	15 150
AT1 instruments (consolidated, CRR/CRD IV)	1 500	1 000
T2 instruments (consolidated, CRR/CRD IV)	1 930	2 068
Subordinated liabilities (issued by KBC Group but not included in AT1 & T2)	0	1 400
Senior debt (issued by KBC Group, nominal amount, remaining maturity > 1 year)	5 525	4 020
Total Liabilities and Own Funds (TLOF)	249 850	245 225
MREL as a % of TLOF	10.4%	9.6%

*Table 8 - MREL hybrid view*

## Solvency of KBC Bank and KBC Insurance separately

In the table below, we have provided solvency information for KBC Bank and KBC Insurance, separately. As is the case for KBC Group, the solvency of KBC Bank is calculated based on CRR/CRD IV. The solvency of KBC Insurance is calculated on the basis of Solvency II.

Solvency, KBC Bank*		
(CRR/CRDIV, fully loaded, in millions of EUR)	31-12-2019	31-12-2018
Total regulatory capital, after profit appropriation	16 660	15 749
Tier-1 capital	14 704	13 625
Of which common equity	13 204	12 618
Tier-2 capital	1 957	2 124
Total weighted risks	89 838	85 474
Common equity ratio	14.7%	14.8%
Tier-1 ratio	16.4%	15.9%
Total capital ratio	18.5%	18.4%

\* The amount of profit for 2019 that has been used to calculate common equity is still subject to the approval of the ECB.

Table 9 - Solvency KBC Bank

Solvency, KBC Insurance (incl. volatility adjustment) (Solvency II, in millions of EUR)		
	31-12-2019	31-12-2018
Own funds	3 496	3 590
Tier-1	2 996	3 090
IFRS parent shareholders' equity	3 422	2 728
Dividend payout	-156	-132
Deduction of intangible assets and goodwill (after tax)	-128	-124
Valuation differences (after tax)	-196	341
Volatility adjustment	104	313
Other	-49	-35
Tier-2	500	500
Subordinated liabilities	500	500
Solvency capital requirement (SCR)	1 727	1 651
Solvency II ratio	202%	217%
Solvency surplus above SCR	1 769	1 939

Table 10 - Solvency KBC Insurance

## ICAAP and ORSA

KBC's ICAAP (Internal Capital Adequacy Assessment Process) consists of numerous business and risk processes that together contribute to the objective of assessing and ensuring at all times that we are adequately capitalised in view of our risk profile and the quality of our risk management and control environment. For this purpose, we also have an internal capital model in place to complement the existing regulatory capital models. This model is used, for example, to measure risk-adjusted performance, to underpin and set risk limits and to assess capital adequacy. It is complemented by a framework for assessing earnings that aims to reveal vulnerabilities in terms of the longer-term sustainability of our business model.

The breakdown of KBC's internal capital per risk type is provided in the following table:

Internal capital distribution, KBC Group	2019	2018
Credit risk and counterparty risk	53%	54%
Interest rate risk and spread risk (banking book)	17%	13%
Market risk (trading book)	2%	2%
Operational risk	8%	8%
Risk related to the insurance entity	15%	16%
Pension risk	5%	5%
Total	100%	100%

Table 11 - Internal capital distribution KBC Group

A backbone process in our ICAAP is the Alignment of Planning Cycles (APC). This yearly process aims to create an integrated three-year plan in which the strategy, finance, treasury and risk perspectives are collectively taken into account. In this process, the risk appetite of the group is set and cascaded by setting risk limits at group and entity level.

The APC is not only about planning, it is also about closely monitoring the execution of the plan in all its aspects (P&L, risk-weighted assets, liquidity). Such monitoring is reflected in dedicated reports drawn up by the various Group functions.

In addition to the integrated approach at group level, KBC Insurance and its insurance and reinsurance subsidiaries conduct an Own Risk and Solvency Assessment (ORSA) on an annual basis, in accordance with Solvency II requirements. Similar to ICAAP, the aim of the ORSA is to monitor and ensure that business is managed in a sound and prudent way and that the KBC Insurance group is adequately capitalised in view of its risk profile and the quality of its risk management and control environment. The ORSA process draws to a large extent on the same 'core processes' as the ICAAP and includes APC, risk appetite setting and ongoing business, risk and capital management processes. Where necessary, these processes are enhanced to take account of the specific nature of the (re)insurance activities and to comply with Solvency II requirements.

## Stress testing

Stress testing is an important risk management tool that adds value both to strategic processes and to day-to-day risk management (risk identification, risk appetite and limit setting, etc.). As such, stress testing is an integral part of our risk management framework, and an important building block of our ICAAP and ORSA.

We define stress testing as a management decision supporting process that encompasses various techniques which are used to evaluate the potential negative impact on KBC's (financial) condition, caused by specific event(s) and/or movement(s) in risk factors ranging from plausible to extreme, exceptional or implausible.

As such, it is an important tool in identifying sources of vulnerability and hence in assessing whether our capital is adequate to cover the risks we face. That is why the APC also includes sensitivities to critical assumptions used in the base case plan. In addition, APC is complemented by a dedicated integrated stress test that is run in parallel. These sensitivities and stress tests are designed to provide assurance that:

- the decisions regarding the financial plan and regarding risk appetite and limit setting are not only founded on a base case, but that they also take account of the impact of more severe macroeconomic and financial market assumptions;
- the levels of capital and liquidity at group level remain acceptable under severe conditions.

The resulting capital ratios are compared to internal and regulatory capital targets.



Even more severe scenarios and sensitivities are calculated in the context of the recovery plan. These scenarios focus on events that lead to a breach of the regulatory capital requirements. As such, the recovery plan provides another insight into key vulnerabilities of the group and the mitigating actions that management could implement should the defined stress materialise.

Numerous other stress tests are run within KBC that provide valuable information for assessing the capital adequacy of the group. They include reverse stress tests, regulatory stress tests, ad hoc integrated and risk-type or portfolio-specific stress tests at group and local level. Relevant stress test impacts are valuable inputs for defining sensitivities in APC planning.

# Credit Risk Management

Credit risk is the potential negative deviation from the expected value of a financial instrument arising from the non-payment or non-performance by a contracting party (for instance a borrower), due to that party's insolvency, inability or lack of willingness to pay or perform, or to events or measures taken by the political or monetary authorities of a particular country. Credit risk thus encompasses default risk and country risk, but also includes migration risk, which is the risk resulting from adverse changes in credit ratings.

In line with the Credit Risk Management Framework, credit risk is managed at both transactional and portfolio level. Managing credit risk at the transactional level means that we have sound practices, processes and tools in place to identify and measure the risks before and after accepting individual credit exposures. Limits and delegations are set to determine the maximum credit exposure allowed and the level at which acceptance decisions are taken. Managing the risk at portfolio level encompasses, inter alia, periodic measuring and analysing of risk embedded in the consolidated loan and investment portfolios and reporting on it, monitoring limit discipline, conducting stress tests under different scenarios and taking risk mitigating measures.

The tables in this section provide an overview – as described in EBA guidelines – of the overall credit risk based on the figures for the end of December 2019. Unless otherwise stated (e.g., RWA tables), net (i.e. after provisions) exposure at default (EAD) before application of credit conversion factors (CCF) is given in the credit risk tables instead of Gross Carrying Value (GCV), which is an accounting concept.

## Managing credit risk at transactional level

We have sound acceptance policies and procedures in place for all kinds of credit risk exposure. We are limiting our description below to exposures related to traditional loans to businesses and to lending to individuals, as these account for the largest part of the group's credit risk exposure.

Lending to individuals (e.g., mortgages) is subject to a standardised process, during which the output of scoring models plays an important role in the acceptance procedure. Lending to businesses is subject to an acceptance process in which relationship management, credit acceptance committees and model-generated output are taken into account.

For most types of credit risk exposure, monitoring is determined primarily by the risk class, with a distinction being made based on the Probability of Default (PD) and the Loss Given Default (LGD). The latter reflects the estimated loss that would be incurred if an obligor defaults.

In order to determine the risk class, we have developed various rating models for measuring how creditworthy borrowers are and for estimating the expected loss of various types of transactions. A number of uniform models throughout the group (models for governments, banks, specialised lending, etc.) are in place, while others have been designed for specific geographic markets (SMEs, private individuals, etc.) or types of transaction. We use the same internal rating scale throughout the group.

We use the output generated by these models to split the non-defaulted loan portfolio into internal rating classes ranging from 1 (lowest risk) to 9 (highest risk) for the PD. We assign an internal rating ranging from PD 10 to PD 12 to a defaulted obligor. PD class 12 is assigned when either one of the obligor's credit facilities is terminated by the bank, or when an irreversible court order is passed instructing the repossession of the security. PD class 11 groups obligors that are more than 90 days past due (in arrears or overdrawn), but that do not meet PD 12 criteria. PD class 10 is assigned to obligors for which there is reason to believe that they are unlikely to pay (on time), but that do not meet the criteria for classification as PD 11 or PD 12. 'Defaulted' status is fully aligned with the 'non-performing' and 'impaired' statuses. Obligor in PD classes 10, 11 and 12 are therefore referred to as 'defaulted' and 'impaired'. Likewise, 'performing' status is fully aligned with the 'non-defaulted' and 'non-impaired' statuses.

For credit linked to defaulted borrowers in PD classes 10, 11 and 12, we record impairment losses based on an estimate of the net present value of the recoverable amount. This is done on a case-by-case basis, and on a statistical basis for smaller credit facilities. In addition, for non-defaulted credit in PD classes 1 to 9, we record impairment losses on a 'portfolio basis', using a formula based on the Internal Ratings Based (IRB) Advanced models used internally, or an alternative method if a suitable IRB Advanced model is not yet available.

As of 2018, impairment losses are recorded according to IFRS 9 requirements (calculated on a lifetime expected credit loss (ECL) basis for defaulted borrowers and on a 12-month or lifetime ECL basis for non-defaulted borrowers, depending on whether there has been a credit risk deterioration and a corresponding shift from 'Stage 1' to 'Stage 2'). Specific IFRS 9 models are used for this purpose.

We review loans to large corporations at least once a year, with the internal rating being updated as a minimum. If ratings are not updated in time, a capital add-on is imposed. Loans to small and medium-sized enterprises and to private individuals are reviewed periodically, with account being taken of any new information that is available (such as arrears, financial data, or a significant change in the risk class).

This monthly exercise can trigger a more in-depth review or may result in measures being taken for the client.

## Managing credit risk at portfolio level

We also monitor credit risk on a portfolio basis, inter alia by means of monthly and/or quarterly reports on the consolidated credit portfolio in order to ensure that lending policy and limits are being respected. In addition, we monitor the largest risk concentrations via periodic and ad hoc reports. Limits are in place at borrower/guarantor, issuer or counterparty level, at sector level and for specific activities or geographic areas. Moreover, we perform stress tests on certain types of credit, as well as on the full scope of credit risk.

Whereas some limits are in notional terms, we also use measures such as 'expected loss' and 'loss given default'. Together with 'probability of default' and 'exposure at default', these concepts form the building blocks for calculating the regulatory capital requirements for credit risk, as KBC has opted to use the Internal Ratings Based (IRB) approach. By the end of 2019, the main group entities and some smaller entities had adopted the IRB Advanced approach, apart from United Bulgarian Bank (UBB) in Bulgaria (Standardised approach) and ČSOB in Slovakia (IRB Foundation approach). 'Non-material' entities will continue to adopt the Standardised approach.

## Scope of credit risk disclosures

The scope of this report at the level of the KBC entities concerned differs depending on the section or table. The RWA tables in the next section are the only ones at KBC group level (i.e. including KBC Insurance).

In the other sections, we either adopt a 'KBC Bank Consolidated' view (basically, this is the group view but without KBC Insurance) or limit the scope to the material entities appearing in the roll-out table below. These entities accounted for 99.1% of the total credit risk exposure of the KBC group in 2019. For each table, the applicable scope (either KBC Bank Consolidated or material entities) will be indicated.

With regard to the timing of and approach to implementing Basel III, KBC has opted for a phased roll-out of the IRB approach at all its material entities except for UBB. A material entity in this respect is defined as any subsidiary that accounts for more than 1% of the risk-weighted assets for credit risk at KBC Group NV. Compliance with this criterion is checked at least annually. The first set of material entities started adopting the IRB Foundation approach at the beginning of 2007, as indicated above.

All material entities, apart from UBB, have adopted the IRB Foundation or Advanced approach. The Basel III Standardised approach is being adhered to until further notice by the other (non-material) entities of the KBC group, in accordance with permanent partial use as per Article 150 (d) of Regulation (EU) No. 575/2013 (CRR). Because of this difference in scope, and also because another definition of exposure is used for the accounting figures, a one-to-one comparison cannot always be made with similar disclosures in the 2019 Annual Report of KBC Group NV.

We moved KBC Bank Ireland from the IRB Foundation to the IRB Advanced approach, because after the sale of the Corporate portfolio in 2019 the bulk of the remaining credit portfolio is located under the retail mortgages which is reported under the IRB Advanced approach.

Roll-out of Basel III pillar 1 approach at end of year shown	2016	2017 - 2018	2019
IRB Advanced Approach	KBC Bank CBC Banque ČSOB Czech Republic KBC Credit Investments KBC Finance Ireland KBC Lease Belgium KBC Commercial Finance KBC Immolease K&H Bank	KBC Bank CBC Banque ČSOB Czech Republic KBC Credit Investments KBC Finance Ireland KBC Lease Belgium KBC Commercial Finance KBC Immolease K&H Bank	KBC Bank CBC Banque ČSOB Czech Republic KBC Credit Investments KBC Finance Ireland KBC Lease Belgium KBC Commercial Finance KBC Immolease K&H Bank KBC Bank Ireland
IRB Foundation approach	KBC Bank Ireland KBC Financial Products ČSOB Slovak Republic	KBC Bank Ireland ČSOB Slovak Republic	ČSOB Slovak Republic
Standardised approach	CIBank Non-material entities	CIBank/UBB Non-material entities	CIBank/UBB Non-material entities

1. Including Hypoteční banka.

Table 12 - Roll-out of Basel III pillar 1 approach

## Overview of RWAs

The table below provides an overview of how Basel III RWA for the KBC group changed over 2019. This table shows the overall RWA figures, including non-material entities, non-transactional RWA (like operational risk and market risk) and the RWA for KBC Insurance according to the Danish compromise approach. It is the only table in this section of the report that contains information other than on credit risk. The minimum capital corresponds with 8% of RWA.

Exposure at Default (EAD) is used as a basis for determining the Risk-Weighted Assets (RWA), which in turn are used to calculate the capital required for the exposure. RWA can be regarded as an exposure weighted according to its 'riskiness'. This 'riskiness' depends on such factors as the loss given default (LGD which in turn is driven by such factors as the amount of collateral or guarantees), the maturity of the exposure and the probability of default (PD) of the obligor.

As mentioned earlier, since its implementation in 2007, the Internal Rating Based (IRB) approach has primarily been used by KBC to calculate its risk-weighted assets. Based on a full application of all the CRR/CRD IV rules, it is used for approximately 91% of the weighted credit risks, approximately 87% of which are calculated according to the Advanced approach and roughly 4% according to the Foundation approach. The remaining weighted credit risks (about 9%) are calculated according to the Standardised approach.

Since mid-2018 there has been a gradual change in the way in which all types of uncertainty in PD, LGD and EAD estimates are expressed. This is because we are shifting from an MRA (Measurement Risk Assessment) approach to a MOC (Margin of Conservatism) approach. This shift was almost entirely realised at the end of 2019. The difference is that, whereas we previously expressed the RWA effects of these uncertainties in the form of add-ons linked to the model in question, these uncertainties are now incorporated into the model itself. Only in specific cases we charge additional RWA in the form of an additional add-on under MOC (e.g., late model review).

At year-end 2019, KBC reported under Pillar 1, to cover for uncertainties, an additional RWA for its PD models of 264 million euros, for its EAD models additional RWA of 1 million euros and for its LGD models an additional RWA of 66 million euros. These amounts include both the MRA add-ons and MOC add-ons.

## Overview of RWAs

EU OV1_Overview of RWAs (in millions of EUR)		RWAs		Minimum capital requirements 2019
		2019	2018	
1	Credit risk (excluding Counterparty Credit Risk)	71 819	67 556	5 746
Article 438(c)(d)	2 Of which the standardised approach	6 485	6 215	519
Article 438(c)(d)	3 Of which the foundation IRB (FIRB) approach	2 772	3 121	222
Article 438(c)(d)	4 Of which the advanced IRB (AIRB) approach	62 055	57 930	4 964
Article 438(d)	5 Of which equity IRB under the simple risk-weighted approach or the IMA	508	290	41
Article 438(c)(d)	6 Counterparty credit Risk	3 049	2 630	244
Article 438(c)(d)	7 Of which mark-to-market	1 003	966	80
Article 438(c)(d)	8 Of which original exposure	0	0	0
	9 Of which the standardised approach	0	0	0
	10 Of which internal model method (IMM)	1 244	991	100
Article 438(c)(d)	11 Of which risk exposure amount for contributions to the default fund of a counterparty credit risk	62	126	5
Article 438(c)(d)	12 Of which CVA	740	547	59
Article 438(e)	13 Settlement risk	2	0	0
Article 449(o)(i)	14 Securitisation exposures in the banking book (after the cap)	79	111	6
	15 Of which IRB approach	79	79	6
	16 Of which IRB supervisory formula approach (SFA)	0	32	0
	17 Of which internal assessment approach (IAA)	0	0	0
	18 Of which standardised approach	0	0	0
Article 438 (e)	19 Market risk	2 587	3 198	207
	20 Of which the standardised approach	425	564	34
	21 Of which IMA	2 162	2 634	173
Article 438(e)	22 Large exposures	0	0	0

Article 438(f)	23	Operational risk	11 370	11 084	910
	24	Of which basic indicator approach	0	0	0
	25	Of which standardised approach	11 370	11 084	910
	26	Of which advanced measurement approach	0	0	0
Article 437(2), Article 48 and Article 60	27	Amounts below the thresholds for deduction (subject to 250% risk weight) (This includes the participation in KBC Insurance weighted at 370%, according to the Danish compromise, and the DTA weighted at 250%)	10 165	10 291	813
Article 500	28	Floor adjustment	0	0	0
	29	Total	99 071	94 870	7 926

Table 13 - EU OV1\_Overview of RWAs

In 2019, RWA at KBC group level increased by 4.2 billion euros (or +4.4%). The largest change can be attributed to credit risk with an increase of +4 263 million euros. This is discussed in detail in the next section. Counterparty credit risk showed an increase of +419 million euros in RWA. Market risk shows a decrease of -611 million euros. Lastly, we have a +286-million-euro RWA increase for operational risk.

The breakdown by the most material entities shows that the consolidated credit risk RWA increase is driven by increases for Belgian entities KBC (+1.1 billion euros) and CBC (+0.25 billion euros), for ČSOB Czech Republic (+0.7 billion euros), for UBB Bulgaria (+0.37 billion euros), for KBC Bank Ireland (+0.3 billion euros) and for ČSOB Slovak Republic (+0.05 billion euros). On the other hand, RWAs decreased for KBC Credit Investments (-0.57 billion euros) and for K&H (-0.3 billion euros). Note, however, that the portfolio of KBC Credit Investments is gradually scaled down, as new bond purchases are entered into the KBC Bank accounts. The reserve for regulatory uncertainties and changes of +2.5 billion euros is taken at the level of KBC Group and is therefore not allocated to any particular entity.

## RWA flow statements of credit risk exposures

This table contains the KBC group's credit risk exposure (excluding KBC Insurance RWA in accordance with the Danish Compromise, counterparty credit risk, operational risk and market risk). It gives an overview of the main RWA drivers responsible for the change in credit risk RWA over 2019.

EU CR8_RWA flow statements of credit risk exposures 31-12-2019 (in millions of EUR)	RWA Amounts	Capital Requirements
1 RWAs as at the end of the previous reporting period	68 824	5 506
2 Asset size	1 750	140
3 Asset quality	-1 000	-80
4 Model updates	-1 577	-126
5 Methodology and policy	4 350	348
6 Acquisitions and disposals	537	43
7 Foreign exchange movements	76	6
8 Other	-31	-2
9 RWAs as at the end of the reporting period	72 929	5 834

Table 14 - EU CR8\_RWA flow statements of credit risk exposures

The change in credit risk RWA in 2019 can be explained mainly by changes in methodology and policy (e.g., new regulatory requirements), internal model changes and underlying portfolio changes. Note that the change in credit risk RWA is broken down by these different drivers on a best-effort basis, because in a dynamic portfolio it is often hard to

pin-point the exact effect of a single driver, as simultaneous changes tend to extrapolate or compensate each other's effect on RWA. The most material drivers are set out below.

(1) The change in credit risk RWA is largely attributable to new **regulatory requirements and a number of methodological changes** (+4.35 billion euros)

- 2.5-billion-euro increase: reserve for regulatory uncertainties and changes (such as estimated impact of implementation, new definition of defaults, add-ons on LGD model for Irish home loans, etc.);
- 1.3-billion-euro increase for estimated impact of TRIM limitations on the use of internal models for corporates and financial institutions (partly offset by a decrease resulting from a change in the model framework, see below);
- 280-million-euro increase due to implementation of IFRS 16;
- 165-million-euro increase following higher weighting for equity positions;
- 125-million-euro increase following higher weighting (from 10 to 25%) for exposure in EUR on Bulgarian sovereign (bonds and cash deposits at the Bulgarian Central Bank).

(2) Credit risk RWA is also largely driven by changes in **transactional models** (-1.58 billion euros). As models are reviewed on an annual basis, each year we can witness significant impacts on RWA, either upwards or downwards. The most material model changes are set out below.

- 900-million-euro decrease resulting from a change in the model framework: most internal models shifted from the MRA framework to the MoC framework, resulting in the removal of bulk add-ons for data uncertainty, as this uncertainty is now reflected in transactional parameters resulting from the models;
- 400-million-euro decrease following joint implementation of reviewed corporate credit risk models (PD, LGD and EAD) for the Belgium Business Unit;
- 250-million-euro decrease following implementation model changes in ČSOB CZ.

(3) A significant part of the change in credit risk RWA is also related to changes in the **acquisitions and disposals** or, in other words, the consolidation scope (+739 million euros) and a further reduction of legacy portfolios (-202 million euros).

- +552 million euros for full consolidation of ČMSS in ČSOB CZ;
- +187 million euros for consolidation entities Julie LH, TBI and C Plus, partially offset by the deconsolidation of Apitri. This is due to an obligation imposed by the ECB to follow strict materiality levels for subsidiaries to be included in the consolidation scope (10-million-euro balance sheet). In view of consistency and simplicity, these companies are also added to the accounting consolidation scope for FINREP and external reporting;
- 202-million-euro decrease for legacy portfolios of former Antwerp Diamond Bank and KBC FI following further reduction of these portfolios and a decrease of the securitisation portfolio of KBC Credit Investments.

(4) Given the fact that **the Irish portfolio** is the most distressed portfolio within the KBC group, it is also deemed important to highlight how its capital requirements have changed. The credit RWA associated with KBC Bank Ireland increased by 0.3 billion euros on an annual basis.

- 0.5-billion-euro increase for the defaulted mortgage portfolio resulting from the write-off of part of the home loan portfolio;
- 34-million-euro increase of RWA on the non-defaulted mortgage portfolio following portfolio growth;

- 18-million-euro increase for the consumer finance portfolio following higher volumes;
- 250-million-euro decrease for the non-retail portfolio of KBC Bank Ireland following further deleveraging of the corporate portfolio.

(5) Credit RWA was also influenced by many other factors, including **volume changes**, changes in **asset quality** (PD and LGD changes), and **foreign-exchange effects**. The most material changes for the credit risk RWA in the core countries are described below. Note that KBC Ireland is excluded in this analysis as changes in this portfolio have already been discussed in the previous paragraph.

- Volumes increased in most group entities. The exact impact on RWA was, however, very hard to quantify given simultaneous model changes, changes in product mix, maturity profile, collateralisation and rating distribution. Hence, only a very rough, indicative volume impact on RWA can be given, which is estimated to be in the order of +1.75 billion euros RWA. We observe volume-driven increases throughout all major markets, in particular for Belgium (KBC retail and corporate +450 million euros, CBC +200 million euros), Czech Republic (ČSOB CZ +550 million euros), Bulgaria (UBB +270 million euros), Slovakia (ČSOB SK +170 million euros) and Hungary (K&H +100 million euros);
- The impact of changes in the drivers (PD and LGD) on asset quality reduced credit risk RWA by an estimated 1 billion euros. For PD, most material changes were the result of rating upgrades for sovereigns of Hungary (-344 million euros), Spain (-120 million euros) and Portugal (-32 million euros);
- For the mortgage portfolios, an overall improvement of the average risk weight (combined effect of PD and LGD migrations) resulted in a decrease of 450 million euros, in particular for Belgium (-190 million euros), Czech Republic (-170 million euros) and Hungary (-70 million euros);
- The impact of foreign exchange movements was estimated at +76 million euros, with the most material being the appreciation of the CZK (+154 million euros), the USD (+46 million euros) and the GBP (+31 million euros), partly offset by the depreciation of the HUF (-166 million euros).
- Other events with impact on credit risk RWA:
  - 388-million-euro increase in fair value changes of hedged items in portfolio hedge;
  - 229-million-euro decrease in RWA on defaulted exposures;
  - 126-million-euro decrease in deferred tax assets, in particular for KBC Bank NV.

## Exposure to credit risk

The tables in this and subsequent sections, i.e. (i) Defaulted and non-defaulted credit risk exposure, (ii) More information about impaired credit risk exposure, and (iii) Credit Risk Mitigation (CRM), provide an overview of the overall credit risk and are based on the figures for the end of December 2019. Unless otherwise stated, these tables include information on lending, securities in the banking book, leasing, commercial finance, repos and reverse repos.

Exposure to securities in the trading book and to structured credit products is excluded in this heading, just as it is in the KBC Insurance investment portfolio. Information on securities in the trading book is reported under 'Credit risk' in the 2019 Annual Report of KBC Group NV and the related risks are taken up in the trading market risk VaR.

The lending portfolio excludes all derivatives (such as interest rate swaps, as these are dealt with in the 'Counterparty credit risk' section).

In the lending portfolio, 'EAD pre CCF' is the maximum amount that KBC expects to be outstanding should an obligor default before application of the credit conversion factor to the undrawn part. For lending exposure treated under the IRB



approach, 'EAD pre CCF' is composed of the amount outstanding at the time of the calculation (without taking provisions into account), plus the off-balance-sheet portion of the exposure.

For lending exposures treated under the Standardised approach, 'EAD pre CCF' can be regarded as the amount outstanding at the time of the calculation, less the provisions set aside, plus the off-balance-sheet portion of the exposure.

For the portfolio of repo-like instruments, 'EAD pre CCF' is determined based on the lending leg in the transaction, which means that for reverse repos, including tri-party repos, this is based on the nominal amount of the cash that was provided by KBC, and that for repos it is based on the market value of the securities sold. This 'nominal' approach is different from how repos and reverse repos are treated in the 'Gross Carrying Value' approach, as explained further in the section 'Non-performing and forborne exposure'.

Unless otherwise stated, all exposure under the Standardised and IRB Foundation approaches is attributed to the region, sector and exposure class of the guarantor. This implies that if substitution is applied to a certain exposure to a borrower guaranteed by another party, the exposure will shift to the region, sector and exposure class of the guaranteeing party in the breakdowns below. For example, when a corporate entity is guaranteed by a bank and substitution is applied, this exposure will be incorporated under 'Institutions' in the breakdowns provided. This substitution logic does not apply to the IRB Advanced approach, since under that approach the effect of a guarantee received is included in the LGD measurement.

Tables containing information on IRB and Standardised exposure classes are divided into two sections, one for a total overview of exposure subject to the IRB approach and one for the overview of the exposure treated via the Standardised approach. They have been split up because each approach has its own (regulatory) breakdown by type of exposure class.

In the notes to the tables, we use the term 'SFT', when referring to exposures related to 'Securities Financing Transactions'. In practice, we refer to repo and reverse repo transactions and to securities borrowing/lending.

## Total and average net amount of exposures

This table contains the net exposure (after the deduction of provisions and reserved interest of 3 125 million euros) at KBC group level, including equity of KBC Insurance in the 'Equity' exposure class, which gives an overview of exposure by exposure class at year-ends 2018 and 2019. The average is calculated using quarter-end exposure in 2019.

EU CRB-B_Total and average net amount of exposures 31-12-2019 (in millions of EUR)		Net value of exposures at the end of the period	Average net exposures over the period
1	Central governments or central banks	67 750	69 159
2	Institutions	17 114	16 841
3	Corporates	112 003	106 677
4	Of which: Specialised lending	10 270	10 274
5	Of which: SMEs	27 079	26 859
6	Retail	98 914	94 450
7	Secured by real estate property	77 996	74 659
8	SMEs	10 372	10 381
9	Non-SMEs	67 625	64 279
10	Qualifying revolving	1 278	1 207
11	Other retail	19 640	18 584

12	SMEs	12 341	11 546
13	Non-SMEs	7 299	7 038
14	Equity	2 611	2 604
15	Total IRB approach	298 393	289 731
16	Central governments or central banks	1 693	1 974
17	Regional governments or local authorities	222	207
18	Public sector entities	13	11
19	Multilateral development banks	0	0
20	International organisations	0	0
21	Institutions	30 371	30 524
22	Corporates	2 922	3 003
23	Of which: SMEs	1 132	1 010
24	Retail	2 188	2 191
25	Of which: SMEs	1 100	1 070
26	Secured by mortgages on immovable property	1 080	1 007
27	Of which: SMEs	286	261
28	Exposures in default	239	259
29	Items associated with particularly high risk	0	0
30	Covered bonds	0	0
31	Claims on institutions and corporates with a short-term credit assessment	0	0
32	Collective investments undertakings	25	47
33	Equity exposures	48	107
34	Other exposures	2 538	2 178
35	Total standardised approach	41 338	41 509
36	Total	339 730	331 239

Table 15 - EU CRB-B\_Total and average net amount of exposures 31-12-2019

EU CRB-B_Total and average net amount of exposures 31-12-2018		Net value of exposures at the end of the period	Average net exposures over the period
(in millions of EUR)			
1	Central governments or central banks	65 768	71 393
2	Institutions	14 989	18 655
3	Corporates	100 102	105 216
4	Of which: Specialised lending	10 179	10 087
5	Of which: SMEs	26 341	26 445
6	Retail	89 540	88 692
7	Secured by real estate property	71 125	71 191
8	SMEs	10 372	10 576
9	Non-SMEs	60 753	60 616
10	Qualifying revolving	1 100	1 100
11	Other retail	17 315	16 400
12	SMEs	11 084	10 312
13	Non-SMEs	6 231	6 088
14	Equity	2 596	2 611
15	Total IRB approach	272 996	286 567
16	Central governments or central banks	1 935	1 901
17	Regional governments or local authorities	201	200
18	Public sector entities	11	11
19	Multilateral development banks	0	0

20	International organisations	0	0
21	Institutions	21 139	17 390
22	Corporates	3 243	3 095
23	Of which: SMEs	956	989
24	Retail	2 325	2 301
25	Of which: SMEs	1 052	1 025
26	Secured by mortgages on immovable property	959	944
27	Of which: SMEs	294	286
28	Exposures in default	277	284
29	Items associated with particularly high risk	0	0
30	Covered bonds	0	0
31	Claims on institutions and corporates with a short-term credit assessment	0	0
32	Collective investments undertakings	27	30
33	Equity exposures	201	200
34	Other exposures	1 642	1 604
35	Total standardised approach	31 959	27 958
36	Total	304 956	314 525

*Table 16 - EU CRB-B\_Total and average net amount of exposures 31-12-2018*

General comments on 2018-2019 developments:

- Overall, there was a significant 34.7-billion-euro increase in 'EAD pre CCF' exposure almost equally divided over 'Corporate' and 'Retail' under the IRB approach and 'Institutions' under Standardised approach;
- The increase in the 'Corporate' EAD is caused by a group-wide volume increase for this exposure class. The full acquisition of ČMSS by ČSOB CZ is the main reason for the 'Retail' EAD increase; to a lesser extent, an increase in Belgian volume has also been substantial;
- The EAD increase of the standardised 'Institution' exposure class is almost equally due to the increased exposure for Securities Financing Transactions (SFT) of +4.72 billion euros and the increased off-balance-sheet exposure of +4.66 billion euros.

## Geographical breakdown of exposures

This table contains the net exposure of material KBC Bank Consolidated entities in KBC's 'home' countries (the term 'material' is defined in the 'Scope of credit risk disclosures' section). Exposure in all the other countries is given in the 'other countries' columns. A list of 'other countries' has been provided.

EU CRB-C_Geographical breakdown of exposures 31-12-2019												
(in millions of EUR)	Europe	Belgium	Ireland	Bulgaria	Czech Republic	Hungary	Slovakia	Other countries Europe	America	Asia	Other geographical areas	Total
1 Central governments and central banks	63 635	13 235	1 293	0	30 118	3 875	2 475	12 638	1 407	1 165	1 235	67 441
2 Institutions	12 720	1 388	11	1	1 801	101	244	9 174	1 033	1 814	1 531	17 098
3 Corporates	105 450	67 344	187	63	14 958	4 326	2 753	15 820	3 869	2 110	438	111 867
4 Retail	98 670	59 577	9 905	6	21 079	2 071	4 791	1 240	182	20	44	98 916
5 Equity	112	71	2	0	0	0	1	39	25	0	6	143
6 Total IRB approach	280 587	141 616	11 398	70	67 956	10 373	10 264	38 911	6 515	5 109	3 255	295 466
7 Central governments and central banks	1 649	0	0	1 312	1	0	70	266	9	0	0	1 658
8 Regional governments or local authorities	214	0	0	40	0	0	174	0	0	0	0	214
9 Institutions	30 487	0	0	17	30	4	73	30 364	19	0	6	30 513
10 Corporates	2 655	503	0	1 358	239	5	466	85	0	0	0	2 655
11 Retail	1 975	0	0	1 061	11	0	902	1	0	0	0	1 975
12 Secured by mortgages on immovable property	1 074	0	0	982	10	0	81	1	0	0	0	1 074
13 Exposures in default	224	0	0	204	3	0	15	2	0	0	0	224
14 Equity	31	0	0	7	7	10	1	6	24	0	0	55
15 Other exposures	507	0	0	273	159	0	75	0	0	0	0	507
16 Total standardised approach	38 817	503	1	5 253	461	18	1 857	30 725	52	0	6	38 876
17 Total	319 404	142 119	11 398	5 322	68 417	10 391	12 121	69 636	6 567	5 110	3 261	334 342

Table 17 - EU CRB-C\_Geographical breakdown of exposures 31-12-2019

Overall, there was a substantial net increase in exposure of 34 billion euros, with increases in our six core markets, but also in 'other' European countries. In Belgium there was a strong increase for corporates and a significant increase for retail. As a result of the full acquisition of ČMSS, the retail exposure in the Czech Republic increased substantially. Lastly, there was a significant increase in the European standardised institutions exposure outside our core markets, namely France (+7.8 billion euros) and Germany (+5 billion euros).

We have limited the list of 'other countries' to those with an 'EAD pre CCF' that is higher than 10 million euros. The list contains a total of 151 countries.

FRANCE	HONG KONG	INDIA	REPUBLIC AZERBAIJAN	SOUTH AFRICA
GERMANY	CAYMAN ISLANDS	CYPRUS	ALGERIA	PHILIPPINES
NETHERLANDS	AUSTRALIA	EGYPT	REPUBLIC OF LATVIA	MONACO
UNITED STATES OF AMERICA	TURKEY	REPUBLIC OF LITHUANIA	ISRAEL	MALTA
UNITED KINGDOM	FINLAND	BENIN	GREECE	TUNISIA
LUXEMBOURG	PORTUGAL	SOUTH KOREA	VIETNAM	GUATEMALA
SPAIN	REPUBLIC OF SLOVENIA	CHILE	BAHRAIN	TAIWAN
CHINA	UNITED ARAB EMIRATES	REPUBLIC OF BELARUS	BANGLADESH	PAKISTAN
ITALY	SWEDEN	ROMANIA	INDONESIA	MALAYSIA
POLAND	NORWAY	NEW ZEALAND	OMAN	UKRAINE
SWITZERLAND	RUSSIAN FEDERATION	DENMARK	REPUBLIC OF CROATIA	JERSEY
CANADA	KENYA	SAUDI ARABIA	BRAZIL	KUWAIT
AUSTRIA	IVORY COAST	NIGERIA	MOROCCO	REPUBLIC OF ARMENIA
SINGAPORE	GHANA	PANAMA	JORDAN	
JAPAN	QATAR	THAILAND	COLOMBIA	

Table 18 - EU CRB-C\_List 'other countries'

Average PD%	Africa	Asia	Central and Eastern Europe & Russia					Other countries	Middle East	North America	Western Europe			Total
			Czech Republic	Hungary	Slovakia	Belgium	Ireland				Other countries			
Central governments and central banks	0.00%	0.00%	0.01%	0.01%	0.00%	0.02%	0.00%	0.00%	0.00%	0.03%	0.01%	0.03%	0.09%	0.01%
Institutions	3.21%	0.29%	0.34%	0.32%	0.00%	0.13%	3.69%	0.08%	0.00%	2.27%	0.00%	4.53%	0.14%	0.36%
Corporates	0.00%	100.00%	3.81%	1.03%	1.59%	3.93%	4.53%	85.91%	90.99%	57.73%	97.39%	100.00%	3.29%	15.90%
Corporates - Specialised Lending	0.00%	0.00%	3.04%	1.46%	2.26%	3.15%	0.00%	0.00%	0.00%	7.46%	0.00%	100.00%	0.57%	3.48%
Corporates - SME	0.00%	0.00%	5.05%	1.13%	0.00%	5.05%	0.00%	0.00%	0.00%	99.86%	99.86%	0.00%	0.00%	19.88%
Corporates - Other	0.00%	100.00%	3.71%	0.58%	0.67%	3.85%	4.53%	85.91%	90.99%	56.85%	95.82%	0.00%	4.99%	20.72%
Equity	0.00%	0.00%	18.82%	0.00%	0.00%	18.82%	0.00%	0.00%	4.53%	4.53%	4.53%	0.00%	0.00%	5.24%
FIRB approach	3.21%	96.84%	0.33%	0.03%	1.59%	2.26%	3.75%	85.45%	76.90%	14.26%	70.98%	0.50%	2.27%	1.53%

Table 19 - Geographical breakdown of average PD – FIRB approach'

Average PD%	Africa	Asia	Central and Eastern Europe & Russia					Other countries	Latin America	Middle East	North America	Oceania	Western Europe			Other geographic areas	Total	
			Bulgaria	Czech Republic	Hungary	Slovakia	Belgium						Ireland	Other countries				
Central governments and central banks	2.69%	0.04%	0.05%	0.00%	0.01%	0.14%	0.02%	0.04%	0.03%	0.14%	0.58%	0.05%	0.03%	0.02%	0.03%	0.04%	0.00%	0.08%
Institutions	3.96%	0.33%	0.58%	3.46%	0.28%	0.18%	0.13%	1.04%	1.06%	5.27%	0.06%	0.03%	0.26%	0.06%	1.10%	0.29%	0.13%	0.61%
Corporates	20.73%	6.73%	4.00%	0.80%	4.18%	3.07%	2.73%	16.36%	1.75%	4.16%	4.27%	5.20%	4.39%	3.94%	10.51%	6.76%	4.53%	4.35%
Corporates - Specialised Lending	16.73%	2.47%	4.41%	0.00%	4.36%	2.17%	17.61%	33.76%	0.00%	2.32%	0.32%	0.88%	6.93%	5.63%	16.57%	11.93%	0.00%	5.91%
Corporates - SME	8.00%	2.35%	5.01%	4.53%	5.44%	3.94%	1.80%	35.23%	34.74%	4.53%	2.02%	4.53%	5.33%	5.37%	0.19%	4.28%	4.53%	5.25%
Corporates - Other	89.48%	7.06%	2.84%	0.80%	2.98%	2.42%	1.74%	5.45%	1.75%	6.09%	4.39%	12.69%	3.60%	2.93%	0.60%	6.31%	4.53%	3.61%
Retail	3.02%	1.12%	3.83%	6.59%	3.42%	8.86%	3.30%	5.56%	2.47%	1.18%	1.54%	1.54%	4.40%	1.63%	19.51%	3.85%	3.14%	4.23%
Retail - Secured by real estate SME	0.10%	0.00%	7.28%	0.76%	0.00%	0.00%	7.29%	0.00%	17.38%	0.09%	19.96%	0.00%	2.53%	2.51%	0.00%	8.96%	0.00%	2.59%
Retail - Secured by real estate non-SME	1.06%	0.66%	3.16%	11.72%	2.68%	10.10%	2.17%	4.66%	1.93%	1.13%	0.82%	2.96%	4.95%	0.80%	19.51%	5.57%	0.00%	4.36%
Retail - Qualifying revolving	0.14%	3.59%	4.89%	0.00%	7.75%	7.48%	4.88%	3.11%	5.92%	0.64%	0.00%	0.69%	0.50%	0.50%	0.00%	3.19%	0.69%	1.00%
Retail - Other SME	4.57%	1.25%	8.78%	1.38%	8.40%	1.46%	10.53%	1.73%	1.43%	1.37%	1.56%	1.19%	6.24%	6.41%	1.55%	3.14%	0.00%	6.79%
Retail - Other non-SME	6.42%	5.73%	5.63%	8.41%	5.73%	4.25%	6.54%	17.93%	4.90%	6.44%	5.71%	48.99%	0.95%	0.95%	2.29%	8.91%	58.10%	3.20%
Equity	4.53%	0.00%	4.53%	0.00%	4.53%	0.00%	0.00%	4.53%	0.00%	0.00%	3.12%	0.00%	3.86%	3.48%	9.02%	4.33%	0.13%	3.80%
AIRB approach	6.73%	1.90%	2.93%	1.21%	3.00%	3.17%	2.71%	1.39%	1.53%	4.88%	2.04%	0.63%	3.51%	2.41%	19.18%	2.35%	0.00%	3.30%

Average LGD%	Africa	Asia	Central and Eastern Europe & Russia						Other countries	Latin America	Middle East	North America	Oceania	Western Europe			Other geographical areas	Total
			Bulgaria	Czech Republic	Hungary	Slovakia	Belgium	Ireland						Other countries				
Central governments and central banks	2.66%	41.48%	24.05%	0.00%	20.11%	33.77%	20.00%	19.97%	20.00%	35.00%	32.64%	24.00%	23.94%	22.15%	20.00%	26.08%	64.93%	25.07%
Institutions	4.67%	12.35%	20.97%	4.50%	24.31%	33.16%	13.51%	17.59%	28.79%	18.28%	19.75%	14.04%	11.51%	24.66%	13.25%	9.52%	52.18%	13.34%
Corporates	13.37%	38.16%	28.25%	43.42%	21.68%	48.34%	15.44%	25.47%	2.00%	12.84%	23.73%	20.77%	20.26%	18.29%	33.59%	30.93%	45.00%	21.91%
Corporates - Specialised Lending	13.59%	9.65%	18.90%	0.00%	14.20%	34.93%	20.62%	41.44%	0.00%	12.79%	0.63%	20.00%	20.29%	19.91%	22.08%	21.79%	0.00%	19.52%
Corporates - SME	1.37%	15.62%	28.75%	45.00%	19.83%	49.07%	40.09%	21.58%	35.92%	45.00%	10.59%	45.00%	22.15%	21.87%	11.37%	28.86%	45.00%	23.70%
Corporates - Other	65.76%	40.17%	33.15%	43.42%	27.88%	54.74%	13.75%	16.91%	2.00%	12.89%	24.41%	22.11%	19.41%	16.13%	53.36%	32.32%	45.00%	21.52%
Retail	19.14%	18.73%	21.64%	19.03%	21.06%	35.18%	18.02%	21.09%	14.94%	20.18%	15.28%	13.80%	19.07%	19.54%	16.56%	18.22%	51.67%	19.84%
Retail - Secured by real estate SME	36.23%	0.00%	45.12%	0.08%	0.00%	0.00%	45.18%	0.00%	0.11%	13.78%	0.11%	0.00%	14.37%	14.37%	0.00%	15.77%	0.00%	14.79%
Retail - Secured by real estate non-SME	16.50%	27.49%	18.56%	23.31%	19.04%	31.70%	10.65%	19.82%	13.28%	21.75%	20.56%	10.76%	17.38%	17.61%	16.56%	17.75%	0.00%	17.77%
Retail - Qualifying revolving	39.87%	37.93%	46.02%	0.00%	43.77%	38.83%	46.03%	39.90%	38.30%	39.26%	0.00%	38.30%	51.49%	51.49%	0.00%	40.62%	50.85%	50.86%
Retail - Other SME	12.20%	14.20%	29.99%	15.40%	22.42%	12.62%	57.29%	14.87%	16.34%	18.21%	14.52%	14.03%	28.69%	29.24%	15.17%	18.44%	0.00%	28.88%
Retail - Other non-SME	48.75%	40.44%	35.76%	23.29%	33.09%	48.33%	40.50%	40.73%	47.53%	45.79%	47.05%	61.62%	29.42%	29.42%	44.39%	31.49%	70.00%	32.47%
Equity	90.00%	0.00%	90.00%	0.00%	90.00%	0.00%	0.00%	90.00%	0.00%	0.00%	90.00%	0.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%
AIRB approach	6.20%	27.62%	23.90%	41.15%	21.09%	39.50%	18.16%	19.96%	6.66%	17.89%	26.03%	15.19%	19.89%	19.39%	16.82%	23.23%	64.84%	21.14%

Table 20 - Geographical breakdown of average PD & LGD – AIRB approach

## Concentration of exposures by industry and counterparty types

These tables contain the net exposure of material KBC Bank Consolidated entities, broken down by industry (rows) and exposure class (columns). The first table gives a description of the exposure under the Internal Ratings Based approach, while the second table gives a description under the Standardised approach.

The exposure classes listed represent a less detailed view of the COREP asset classes.

EU CRB-D_Exposures by industry and counterparty types 31-12-2019		Central governments and central banks	Institutions	Corporates	Retail	Equity	IRB approach Total
(in millions of EUR, under IRB)							
1	Agriculture, forestry and fishing	0	0	2 759	2 672	0	5 431
2	Mining and quarrying	0	0	539	18	0	558
3	Manufacturing	0	2	23 430	1 838	1	25 271
4	Electricity, gas, steam and air conditioning supply	0	1	5 040	32	0	5 073
5	Water supply	0	0	1 596	91	0	1 687
6	Construction	0	4	10 709	4 166	6	14 885
7	Wholesale and retail trade	0	0	14 963	4 404	1	19 368
8	Transportation and storage	0	0	6 145	856	0	7 001
9	Accommodation and food service activities	0	0	865	949	0	1 814
10	Information and communication	0	0	2 627	585	12	3 224
11	Real estate activities	0	0	10 041	1 782	13	11 836
12	Professional, scientific and technical activities	0	0	3 694	3 409	11	7 114
13	Administrative and support service activities	0	1	3 293	1 006	14	4 313
14	Public administration and defence, compulsory social security	39 915	1 311	76	5	0	41 306
15	Education	0	18	784	222	0	1 024
16	Human health and social work activities	83	63	4 592	3 081	0	7 820
17	Arts, entertainment and recreation	0	3	508	271	0	782
18	Financial and insurance activities	26 539	15 685	18 865	490	79	61 659
19	Activities of extraterritorial organisations and bodies	904	0	56	0	0	961
20	Private individuals	0	0	182	69 114	0	69 296
21	Other, service activities	0	0	355	503	7	864
22	Other	0	10	749	3 421	0	4 179
23	Total	67 441	17 098	111 867	98 916	143	295 466

Table 21 - EU CRB-D\_Exposures by industry and counterparty types 31-12-2019

EU CRB-D_Exposures by industry and counterparty types 31-12-2019		Central governments and central banks	Regional governments or local authorities	Institutions	Corporates	Retail	Secured by mortgages on immovable property	Exposures in default	Equity	Other exposures	Standardised approach Total
(in millions of EUR, under STA)											
1	Agriculture, forestry and fishing	0	0	0	89	63	25	8	0	0	184
2	Mining and quarrying	0	0	0	0	2	1	3	0	0	5
3	Manufacturing	0	0	0	596	66	133	34	0	0	828
4	Electricity, gas, steam and air conditioning supply	0	0	0	61	4	3	6	0	0	74
5	Water supply	0	0	0	11	1	1	1	0	0	14
6	Construction	0	0	0	155	24	36	14	0	0	230
7	Wholesale and retail trade	0	0	0	430	94	132	31	0	0	687
8	Transportation and storage	0	0	0	42	22	21	2	0	0	88
9	Accommodation and food service activities	0	0	0	7	5	7	13	0	0	31
10	Information and communication	0	0	0	38	5	3	0	5	0	50
11	Real estate activities	0	0	0	36	1	11	17	0	0	65
12	Professional, scientific and technical activities	0	0	0	21	19	4	1	0	1	45
13	Administrative and support service activities	0	0	0	18	6	9	1	1	0	34
14	Public administration and defence, compulsory social security	1 435	214	0	0	0	1	0	0	2	1 653
15	Education	0	0	0	11	0	1	0	0	0	11
16	Human health and social work activities	0	0	0	7	1	4	0	0	0	13
17	Arts, entertainment and recreation	0	0	0	0	1	2	3	0	0	6
18	Financial and insurance activities	222	0	30 513	570	0	1	17	7	270	31 601
19	Activities of extraterritorial organisations and bodies	0	0	0	0	0	0	0	0	0	0
20	Private individuals	0	0	0	0	1 659	672	56	0	0	2 387
21	Other, service activities	0	0	0	81	3	2	0	0	0	86
22	Other	0	0	0	482	0	8	16	42	235	783
23	Total	1 658	214	30 513	2 655	1 975	1 074	224	55	507	38 876

Table 22 - EU CRB-D\_Exposures by industry and counterparty types 31-12-2019



EU CRB-D_Exposures by industry and counterparty types 31-12-2018		Central governments and central banks	Institutions	Corporates	Retail	Equity	IRB approach Total
(in millions of EUR, under IRB)							
1	Agriculture, forestry and fishing	0	0	2 319	2 682	0	5 001
2	Mining and quarrying	0	0	582	15	0	596
3	Manufacturing	0	0	22 329	1 824	2	24 156
4	Electricity, gas, steam and air conditioning supply	68	1	4 511	31	0	4 611
5	Water supply	0	0	1 401	82	0	1 483
6	Construction	0	0	10 500	3 874	1	14 376
7	Wholesale and retail trade	0	0	15 083	4 374	1	19 458
8	Transportation and storage	0	0	5 779	800	0	6 579
9	Accommodation and food service activities	0	0	730	892	0	1 622
10	Information and communication	0	0	2 283	567	16	2 866
11	Real estate activities	0	0	9 809	1 657	13	11 479
12	Professional, scientific and technical activities	0	0	3 519	3 328	11	6 858
13	Administrative and support service activities	0	7	3 169	931	4	4 110
14	Public administration and defence, compulsory social security	40 301	1 270	88	5	0	41 664
15	Education	0	14	747	228	0	989
16	Human health and social work activities	72	59	4 538	2 732	0	7 401
17	Arts, entertainment and recreation	0	4	456	261	0	721
18	Financial and insurance activities	24 176	13 480	10 666	482	69	48 874
19	Activities of extraterritorial organisations and bodies	1 062	0	70	0	0	1 132
20	Private individuals	0	0	151	62 516	0	62 667
21	Other, service activities	0	0	359	483	7	848
22	Other	63	155	1 016	1 571	4	2 809
23	Total	65 743	14 990	100 104	89 335	128	270 300

Table 23 - EU CRB-D\_Exposures by industry and counterparty types 31-12-2018

EU CRB-D_Exposures by industry and counterparty types 31-12-2018											
(in millions of EUR, under STA)	Central governments and central banks	Regional governments or local authorities	Institutions	Corporates	Retail	Secured by mortgages on immovable property	Exposures in default	Equity	Other exposures	Standardised approach	Total
1 Agriculture, forestry and fishing	0	0	0	53	68	21	8	0	0		150
2 Mining and quarrying	0	0	0	0	2	1	3	0	0		6
3 Manufacturing	0	0	0	499	67	120	33	0	0		719
4 Electricity, gas, steam and air conditioning supply	0	0	0	68	2	1	7	0	0		78
5 Water supply	0	0	0	20	1	1	2	0	0		23
6 Construction	0	0	0	83	24	31	28	0	0		166
7 Wholesale and retail trade	0	0	0	369	93	103	44	0	0		609
8 Transportation and storage	0	0	0	26	23	12	3	0	0		64
9 Accommodation and food service activities	0	0	0	7	3	8	17	0	0		35
10 Information and communication	0	0	0	18	3	2	5	0	0		27
11 Real estate activities	0	0	0	11	2	12	40	0	0		66
12 Professional, scientific and technical activities	0	0	0	6	23	3	1	0	0		33
13 Administrative and support service activities	0	0	0	18	7	3	1	0	0		30
14 Public administration and defence, compulsory social security	1 101	194	0	0	0	1	0	0	0		1 296
15 Education	0	0	0	5	0	1	0	0	0		6
16 Human health and social work activities	0	0	0	3	2	3	0	0	0		8
17 Arts, entertainment and recreation	0	0	0	1	1	1	4	0	0		7
18 Financial and insurance activities	808	0	21 080	48	1	1	0	0	0		21 938
19 Activities of extraterritorial organisations and bodies	0	0	0	0	0	0	0	0	0		0
20 Private individuals	0	0	0	2	1 826	614	58	0	0		2 500
21 Other, service activities	0	0	0	10	1	1	0	13	243		268
22 Other	0	0	32	1 588	0	10	12	192	178		2 012
23 Total	1 909	194	21 112	2 836	2 149	949	264	205	421		30 040

Table 24 - EU CRB-D\_Exposures by industry and counterparty types 31-12-2018

The overall increase in exposure comprised a 25-billion-euro increase under the IRB approach and a 9-billion-euro increase under the Standardised approach. The increase under the IRB approach is mainly related to the 'Corporates' in the 'Financial and insurance activities' sectors and 'Manufacturing' and 'Retail' under the 'Private individuals' item. The increase under the Standardised approach can be fully attributed to 'Institutions' in the 'Financial and insurance activities' sector and is partly due to the increased exposure to SFT (mostly repos and reverse repos).

## Maturity of exposures

This table contains the net exposure of material KBC Bank Consolidated entities broken down by residual maturity and exposure class. Please be aware that this only concerns on-balance-sheet exposures.

There was a year-on-year increase in on-balance-sheet exposure of about 9 billion euros for the IRB 'Corporates' segment and around 8 billion euros for the IRB 'Retail' segment. In addition, at IRB level, for both 'Central governments or central banks' and 'Institutions' the on-balance exposure increased by 2 billion euros. Concerning the on-balance standardised exposure, there was one major change with an increase of 4.7 billion euros for the 'Institutions' exposure class. The exposure increases were mainly concentrated in the ≤1 year (+14 billion euros) and >5 years (+8 billion euros) maturity buckets.

EU CRB-E_Maturity of exposures 31-12-2019 (in millions of EUR)		> 1 year				No stated maturity	Total
		On demand	≤ 1 year	≤ 5 years	> 5 years		
1	Central governments or central banks	59	29 505	18 295	18 378	1	66 239
2	Institutions	100	7 546	3 741	1 697	28	13 112
3	Corporates	3 805	29 549	12 723	22 876	1 295	70 247
4	Retail	1 037	3 375	8 258	71 506	1 774	85 950
5	Equity	0	13	129	0	1	143
6	IRB approach	5 000	69 989	43 145	114 458	3 098	235 690
7	Central governments and central banks	222	82	522	761	71	1 658
8	Regional governments or local authorities	0	4	5	21	174	204
9	Institutions	25	17 570	16	0	111	17 723
10	Corporates	0	276	436	741	763	2 216
11	Retail	0	116	349	360	914	1 739
12	Secured by mortgages on immovable property	0	83	170	684	81	1 018
13	Exposures in default	0	65	35	101	19	221
14	Collective investments undertakings	0	0	0	0	2	2
15	Equity	0	0	0	0	55	55
16	Other exposures	110	0	0	0	396	505
17	Standardised approach	357	18 196	1 534	2 669	2 586	25 342
18	Total	5 357	88 184	44 679	117 127	5 684	261 031

Table 25 - EU CRB-E\_Maturity of exposures 31-12-2019

## Defaulted and non-defaulted credit risk exposure

A client/facility is considered to be **in default if** – and only if – one or more of the following conditions are fulfilled:

1. The client/facility is 'unlikely to pay';
2. The client/facility is '>90 DPD default';
3. The client/facility is 'irrecoverable'.

KBC's definition of default builds on the definition set out in the Basel II Capital Requirements Regulation (CRR). Based on the EBA paper on Forbearance and **Non-performing exposures**, KBC's definition of default is also fully aligned with the EBA's definition of non-performing (PD 10-11-12), i.e. they should be regarded as synonymous. The same holds true for the definition of 'impaired financial instrument' according to International Financial Reporting Standards (IFRS).

### Credit quality of exposures by exposure class and instrument

This table contains the net exposure of material KBC Bank Consolidated entities, broken down by defaulted and non-defaulted exposure for IRB and Standardised exposure classes. KBC does not have any general credit risk adjustments.

EU CR1-A_Credit quality of exposures by exposure class and instrument 31-12-2019				
(in millions of EUR)	a) Defaulted exposures	b) Non-defaulted exposures	c) Specific credit risk adjustment	Net values (a+b-c)
1 Central governments and central banks	8	67 443	10	67 441
2 Institutions	28	17 072	3	17 098
3 Corporates - Specialised Lending	430	10 051	211	10 270
4 Corporates – SME	1 080	26 619	619	27 079
5 Corporates – Other	1 746	73 652	881	74 517
6 Retail - Secured by real estate SME	97	10 302	27	10 372
7 Retail - Secured by real estate non-SME	2 144	66 168	685	67 626
8 Retail - Qualifying revolving	4	1 280	5	1 278
9 Retail - Other SME	349	12 230	239	12 340
10 Retail - Other non-SME	126	7 289	115	7 300
11 Equity	1	142	0	143
12 IRB approach	6 012	292 248	2 795	295 466
13 Central governments and central banks	0	1 658	0	1 658
14 Regional governments or local authorities	0	214	0	214
15 Institutions	0	30 513	0	30 513
16 Corporates	0	2 676	21	2 655
17 Of which SME	0	1 145	14	1 132
18 Retail	0	1 991	16	1 975
19 Of which SME	0	1 110	10	1 100
20 Secured by mortgages on immovable property	0	1 075	0	1 074
21 Of which SME	0	286	0	286
22 Exposures in default	413	0	189	224
23 Collective investments undertakings	0	2	0	2
24 Equity	0	55	0	55
25 Other items	0	506	0	505
26 Standardised approach	413	38 690	227	38 876
27 Total	6 425	330 939	3 022	334 342

28	Of which: Loans	6 397	211 644	3 014	215 027
29	Of which: Debt securities	7	43 396	8	43 395
30	Of which: Off-balance-sheet exposures	467	72 905	62	73 310

Table 26 - EU CR1-A\_Credit quality of exposures by exposure class and instrument 31-12-2019

Most defaulted exposure is linked to corporate exposure classes and retail mortgages. Overall, there was a significant reduction in defaulted exposure of -971 million euros, mainly due to a decrease in the portfolio of default retail mortgages in Ireland.

## Credit quality of exposures by industry or counterparty types

This table contains the net exposure of material KBC Bank Consolidated entities, broken down by industry and defaulted and non-defaulted exposure.

EU CR1-B_Credit quality of exposures by industry or counterparty types 31-12-2019					
(in millions of EUR)	a) Defaulted exposures	b) Non-defaulted exposures	c) Specific credit risk adjustment	Net values (a+b-c)	
1	Agriculture, forestry and fishing	161	5 509	55	5 615
2	Mining and quarrying	9	558	4	563
3	Manufacturing	772	25 626	299	26 099
4	Electricity, gas, steam and air conditioning supply	126	5 058	37	5 147
5	Water supply	9	1 699	6	1 702
6	Construction	475	14 889	249	15 115
7	Wholesale and retail trade	1 403	19 427	775	20 054
8	Transportation and storage	72	7 053	37	7 089
9	Accommodation and food service activities	103	1 774	31	1 846
10	Information and communication	35	3 254	16	3 273
11	Real estate activities	383	11 652	134	11 901
12	Professional, scientific and technical activities	186	7 039	66	7 159
13	Administrative and support service activities	43	4 324	20	4 348
14	Public administration and defence, compulsory social security	8	42 961	11	42 959
15	Education	23	1 014	2	1 035
16	Human health and social work activities	78	7 788	33	7 833
17	Arts, entertainment and recreation	24	777	13	788
18	Financial and insurance activities	98	93 191	29	93 260
19	Activities of extraterritorial organisations and bodies	1	961	1	961
20	Private individuals	2 334	70 061	712	71 683
21	Other, service activities	9	948	7	950
22	Other	71	5 374	483	4 962
23	Total	6 425	330 939	3 022	334 342

Table 27 - EU CR1-B\_Credit quality of exposures by industry or counterparty types 31-12-2019

The main 'industries' were retail banking ('Private individuals'), corporate banking (mainly 'Manufacturing', 'Wholesale and retail trade' and 'Construction') and banking for the public sector ('Public administration and defence, compulsory social security'), as was the case in 2018. The defaulted exposure is mainly concentrated in retail and corporate banking.

The exposure attributed to 'Financial and insurance activities' largely consists of SFT related exposures (58.3 billion euros). At KBC, SFT exposures (mostly repos and reverse repos) are covered by the credit risk framework (instead of the counterparty risk framework).

## Credit quality of exposures by geography

This table contains the net exposure of material KBC Bank Consolidated entities broken down by geographic area for defaulted and non-defaulted exposure. The logic used for the geographic breakdown is consistent with the previous table on the geographic breakdown of exposures.

EU CR1-C_Credit quality of exposures by geography 31-12-2019				
(in millions of EUR)	a) Defaulted exposures	b) Non-defaulted exposures	c) Specific credit risk adjustment	Net values (a+b-c)
1 Africa	15	973	10	978
2 Asia	90	5 064	44	5 110
3 Central and Eastern Europe & Russia	1 459	98 347	922	98 884
4 Bulgaria	365	5 139	181	5 322
5 Czech Republic	727	68 122	432	68 417
6 Hungary	196	10 343	147	10 391
7 Slovakia	147	12 122	148	12 121
8 Other countries	24	2 621	13	2 632
9 Latin America	0	904	0	904
10 Middle East	42	1 074	13	1 103
11 North America	122	5 604	63	5 663
12 Oceania	3	665	2	666
13 Western Europe	4 695	217 793	1 968	220 520
14 Belgium	2 519	140 936	1 336	142 119
15 Ireland	1 650	10 161	412	11 398
16 Other countries	526	66 697	219	67 003
17 Other geographical areas	0	515	0	515
18 Total	6 425	330 939	3 022	334 342

Table 28 - EU CR1-C\_Credit quality of exposures by geography 31-12-2019

As expected, the main defaulted exposure is in KBC's six core markets (Belgium, the Czech Republic, Hungary, Slovak Republic, Bulgaria and Ireland). Although the defaulted exposure within the Irish portfolio is still significant, it decreased by 32% in 2019 (see later in this document for more information). In total, around 1.9% of the exposure is defaulted, which is substantially lower than the 2.4% at the end of 2018.

## Ageing of past-due exposures

A financial contract is past due when a counterparty fails to make a payment when it is contractually due. In case of factoring, a purchased receivable is past due when the invoice debtor fails to make payment on the due date of an undisputed invoice.

This table contains the on-balance-sheet past-due exposure of material KBC Bank Consolidated entities. Bear in mind that there are defaulted (or NPL) exposures that are NOT past due, but also exposures (less than 90 days) past due that are non-defaulted (or performing).

EU CR1-D_Ageing of past-due exposures (in millions of EUR)	> 30 days		> 60 days		> 90 days		> 180 days	
	≤ 30 days	≤ 60 days	≤ 90 days	≤ 180 days	≤ 1year	> 1 year		
Loans	1 756	526	111	384	384	2 216		
Debt securities	0	0	0	0	0	7		
Total	1 756	526	111	384	384	2 223		

Table 29 - EU CR1-D\_Ageing of past-due exposures

## Non-performing and forbore exposure

In order to avoid a situation where an obligor facing financial difficulties ends up defaulting, loans can be renegotiated and forbearance measures granted in accordance with internal policy guidelines.

Forbearance measures consist of concessions towards a borrower that may involve:

- lowering or postponing interest or fee payments;
- extending the term of the loan to ease the repayment schedule;
- capitalising arrears;
- declaring a moratorium (temporary principal and/or interest payment holidays);
- providing debt forgiveness.

After a forbearance measure has been decided upon, a forbearance tag is attached to the file in the credit systems for identification, monitoring and reporting purposes.

A client with a forbore loan will in principle be assigned a PD class that is higher than the one it had before the forbearance measure was granted, given the higher risk of the client. In accordance with IFRS 9 requirements, a facility tagged as 'forborne' will always be allocated to 'Stage 2' (please note that this only applies to non-defaulted clients, since defaulted clients are always classified in 'Stage 3').

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

A forbore facility with a 'non-defaulted' status will be tagged as 'forborne' for at least two years after the forbearance measure has been granted, or after the client/facility becomes non-defaulted, and can only be removed when strict extra criteria have been met (non-defaulted, regular payments, etc.).

As forbearance measures constitute an objective indicator (i.e. impairment trigger) that requires assessing whether impairment is needed, all forbearance measures are subject to an impairment test.

The following table contains the exposure of KBC Bank Consolidated entities in terms of Gross Carrying Value (GCV). It provides details on the non-performing and forborne part of the loan portfolio. It should be noted that the difference in total exposure between GCV and 'EAD pre CCF' was due primarily to the different treatment of repo transactions under the IRB approach. When calculating the GCV, repo netting is applied, which reduces the exposure by around 13.9 billion euros.

EU CR1-E_Non-performing and forborne exposures 31-12-2019  (in millions of EUR)	Performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received	
	Of which performing but past due > 30 days and ≤ 90 days	Of which performing forborne	Of which non-performing				On performing exposures		On non-performing exposures		On non-performing exposures	Of which forborne exposures	
			Of which defaulted	Of which impaired	Of which forborne	Of which forborne	Of which forborne						
10 Debt securities	43 994	0	0	7	7	7	0	-7	0	-6	0	0	0
20 Loans and advances	196 568	478	936	5 464	5 462	5 460	2 140	-380	-13	-2 475	-503	2 624	2 376
30 Off-balance-sheet exposures	48 748	0	15	307	307	307	13	-30	0	-107	0	113	1

Table 30 - EU CR1-E\_Non-performing and forborne exposures 31-12-2019

This table is based on the figures of KBC Bank Consolidated. This table includes the cash balances with central banks and the other demand deposits in order to be in line with FINREP table 18. In 2019, there was a major decrease in the non-performing exposures mainly due to the write-offs (-0.9 billion euros for KBC Bank Consolidated) on non-performing portfolios across different entities (of which an internal write-off on Residual Mortgage Balances in Ireland is the main contributor decreasing non-performing accumulated impairment by 489 million euros).

## More information about impaired credit risk exposure

The information provided in the tables in this section is independent of the regulatory approach or the assigned exposure class. It is worth mentioning that the exposure reported here and originated via the Standardised approach is net of provisions. This is not the case for exposure calculated according to the IRB approach.

For all data on impairment, provisions and value adjustments, reference is made to the 'Consolidated financial statements' section of the 2019 Annual Report of KBC Group NV.

## Changes in stock of specific credit risk adjustments

This table shows specific credit risk adjustments for the on-balance-sheet defaulted credit portfolio at the KBC Bank Consolidated level over the past year. It should be noted that KBC does not have any general credit risk adjustments.



EU CR2-A_Changes in stock of specific credit risk adjustments 31-12-2019 (in millions of EUR)	Accumulated specific credit risk adjustment
1 Opening balance	3 534
2 Increases due to amounts set aside for estimated loan losses during the period	217
3 Decreases due to amounts reversed for estimated loan losses during the period	0
4 Decreases due to amounts taken against accumulated credit risk adjustments	-937
5 Transfers between credit risk adjustments	0
6 Impact of exchange rate differences	1
7 Business combinations, including acquisitions and disposals of subsidiaries	-1
8 Other adjustments	52
9 Closing balance	2 866
10 Recoveries on credit risk adjustments recorded directly to the statement of profit and loss	-60
11 Specific credit risk adjustments directly recorded to the statement of profit and loss	0

Table 31 - EU CR2-A\_Changes in stock of specific credit risk adjustments 31-12-2019

The scope of this table is 'KBC Bank Consolidated'. It contains the impairments on Debt securities and Loans & advances for portfolios subject to impairment ('At amortised cost' and 'Fair value through OCI'). Changes in fair value due to credit risk are not included in this table.

As regards the figures for 2019, the decrease is mainly linked to write-offs on non-performing loan portfolios across different entities (of which KBC Ireland -531 million euros, KBC Bank -212 million euros, UBB -77 million euros and ČSOB CZ -72 million euros).

## Changes in the stock of defaulted loans and debt securities

This table (restated dd. 15/06/2020) shows the change in the past year of the stock of defaulted loans and debt securities for material KBC Bank Consolidated entities.

EU CR2-B_Changes in the stock of defaulted loans and debt securities 31-12-2019 (in millions of EUR)	Value defaulted exposures
1 Opening Balance	7 396
2 Loans and debt securities that have defaulted or impaired since the last reporting period	1 563
3 Returned to non-defaulted status	528
4 Amounts written off	969
5 Other changes	1 037
6 Closing Balance	6 425

Table 32 - EU CR2-B\_Changes in the stock of defaulted loans and debt securities 31-12-2019

As already stated, non-performing and forborne exposures in 2019 decreased in a number of KBC group entities, which was mainly attributable to KBC Ireland.

## Credit Risk Mitigation (CRM)

Credit risk mitigation entails the use of techniques to lower credit risk and hence capital needs, e.g., regulatory capital.

### Netting

To date, KBC has not engaged in on-balance-sheet netting (i.e. the offsetting of balance-sheet products such as loans and deposits).

### Collateral in repo transactions

KBC engages in the following types of repo transaction:

- **Reverse repos and 'buy and sell-back' transactions:** These transactions are considered deposits made by KBC, with KBC lending cash against securities until the cash is repaid. The difference between reverse repos and buy and sell-backs is technical and relates to the way coupon payments are handled during the transaction;
- The securities underlying the reverse repo transactions are almost entirely government securities, with the underlying issuers of the remaining securities being mainly banks and corporate entities. In order to conclude such transactions, a standard General Master Repurchase Agreement (GMRA) needs to be concluded with the counterparty, and legal certainty must exist for all relevant jurisdictions. Transactions also need to be compliant with KBC's repo policies for all relevant entities;
- **Repos and 'sell and buy-back' transactions:** These transactions are considered funding, as KBC receives cash in exchange for securities provided as collateral until the cash is repaid. Here too, the difference between repos and sell and buy-backs is a technical one.

### Collateral in the lending portfolio

Collateral applying to lending exposure subject to the **Standardised approach** has a direct effect by lowering the EAD, which in turn has a direct effect on RWA and on capital. The CRD eligibility criteria for the Standardised approach are always the reference for collateral application.

Credit risk mitigation is only applied when the necessary policies and procedures are in place.

Under the **IRB Foundation approach**, only the collateral meeting the eligibility criteria and minimum requirements (as imposed by the CRD) to qualify for credit risk mitigation has been included in the figures.

As a result, the effective amount of collateral obtained in KBC to cover exposure falling under the Foundation approach, is much higher than the figure taken into account for risk mitigation purposes. Real estate collateral obtained for KBC's commercial real estate financing activities is not taken into account for credit risk mitigation purposes, for instance. Collateral risk mitigation in the Foundation context has a direct impact on the LGD percentage.

For the lending exposure subject to the **IRB Advanced approach**, the collateral applying to these exposures affects RWA because collateral is included in LGD modelling.

## Unfunded credit protection

Unfunded credit protection is provided entirely through guarantees.

The impact of guarantees under the Standardised and IRB Foundation approaches is at the level of exposure receiving a better rating through a lower risk weight (STA) or PD substitution (FIRB), resulting in lower capital requirements.

Unfunded credit protection applying to lending exposure under the IRB Advanced approach affects RWA only indirectly as guarantees are included in LGD modelling. Additional information on how unfunded credit protection was taken into account in the internal LGD estimation under this approach can be found in the 'Internal modelling' section.

The main types of guarantors are government entities and large financial institutions, such as banks, investment banks and insurance companies.

## CRM techniques – Overview

This table contains the net exposure of material KBC Bank Consolidated entities. It gives an overview of the CRM techniques used for defaulted and non-defaulted exposure, irrespective of the regulatory approach used. KBC does not use credit derivatives to mitigate credit risk and, therefore, the table no longer has a column entitled 'Exposure secured by credit derivatives'.

Please note that defaulted exposures are what remains after specific credit risk adjustments are deducted.

EU CR3_CRM techniques 31-12-2019				
(in millions of EUR)	Exposures unsecured - Carrying amounts	Exposures secured - Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees
1 Loans	173 505	41 521	32 650	8 871
2 Debt securities	43 364	31	0	31
3 Other	42 239	33 681	33 681	0
4 Total exposures	259 108	75 234	66 331	8 902
5 Of which defaulted	3 216	754	686	68

Table 33 - EU CR3\_CRM techniques 31-12-2019

## Credit exposure and CRM – Standardised approach

KBC uses the regulatory defined risk buckets to assess the quality, and linked risk weight, for all exposure 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.

## Credit risk exposure and CRM effects – Standardised approach

The tables below show the net KBC Bank Consolidated exposure calculated using the Standardised approach for the end of 2018 and 2019, broken down by exposure class, excluding the SFT. The exposure classes are those defined for the purpose of regulatory reporting according to the Standardised approach, viz.:

- **Central Governments or central banks:** claims on central authorities and governments and other assets weighted at 0% (such as Cash and Cash at central banks);
- **Regional government or local authorities:** claims on Regional Governments and Local Authorities independently if these qualify as 'Sovereign' under the IRB approach;
- **PSE:** claims on Public Sector Entities;
- **MDB:** claims on Multilateral Development Banks independently if these qualify as 'Sovereign' under the IRB approach;
- **International organisations:** claims on a specific list of organisations (e.g., International Monetary Fund, European Central Bank);
- **Institutions:** claims on banks;
- **Corporates:** claims on all corporate exposure, including small and medium-sized enterprises that are treated as corporate clients;
- **Retail:** claims on retail clients (including SMEs not qualifying for treatment as corporate clients). Most of these claims are related to mortgages and categorised under 'secured by real estate';
- **Secured by mortgages on immovable property:** claims that are (fully) covered by real estate collateral via mortgages and including real estate leasing. These are extracted from the above categories (mostly retail or corporate);
- **Exposures in default:** all exposure which is past due, meaning that it is more than 90 days in arrears. All past due exposure is extracted from all the other categories;
- **Exposures associated with particularly high risk:** exposure that is not collateralised and/or not rated, attracting a risk-weighting equal to or higher than 150% and therefore considered 'high risk'. Past due and equity exposure are excluded;
- **Covered bonds:** exposure for which the credit risk is mitigated by risk positions on very highly rated governments, authorities or institutions. Past due, equity and high-risk claims are excluded;
- **Institutions and corporates with short term credit assessment:** exposure (to institutions or to corporates) which is rated and has a maturity of less than three months. Past due, equity and high-risk claims are excluded. This exposure has been assigned to its respective exposure type, namely 'Institutions' or 'Corporates';
- **CIU:** claims on Collective Investment Undertakings;
- **Equity:** Shares and Mutual Funds. Previously the equities were reported under the exposure class of the issuing entity of the equity instrument. Now all equity exposure is grouped under this single exposure class;
- **Other:** all other claims (e.g., other assets).

EU CR4_Credit risk exposure and CRM effects – standardised 31-12-2019 (in millions of EUR)		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
		On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
Exposure classes							
1	Central governments or central banks	1 693	0	1 693	1	231	13.6%
2	Regional government or local authorities	202	20	202	7	43	20.6%
3	Public sector entities	11	2	14	2	3	19.6%
4	Multilateral development banks	0	0	86	0	0	0.0%
5	International organisations	0	0	0	0	0	0.0%
6	Institutions	231	12 792	231	2	101	43.3%
7	Corporates	2 395	548	2 321	212	2 421	95.6%
8	Retail	1 910	296	1 849	116	1 323	67.3%
9	Secured by mortgages on immovable property	1 022	58	1 022	31	440	41.8%
10	Exposures in default	430	3	232	2	256	109.9%
11	Higher-risk categories	0	0	0	0	0	0%
12	Covered bonds	0	0	0	0	0	0%
13	Institutions and corporates with a short-term credit assessment	0	0	0	0	0	0%
14	Collective investment undertakings	25	0	25	0	21	86%
15	Equity	51	0	48	0	56	117.6%
16	Other items	2 585	37	2 511	32	1 673	65.8%
17	Total	10 554	13 757	10 233	405	6 570	61.8%

Table 34 - EU CR4\_Credit risk exposure and CRM effects - standardised 31-12-2019

EU CR4_Credit risk exposure and CRM effects – standardised 31-12-2018 (in millions of EUR)		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
		On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
Exposure classes							
1	Central governments or central banks	1 934	1	1 934	0	141	7.3%
2	Regional government or local authorities	187	13	187	4	40	21%
3	Public sector entities	10	1	14	2	2	13.5%
4	Multilateral development banks	0	0	65	0	0	0%
5	International organisations	0	0	0	0	0	0%
6	Institutions	378	8 128	378	3	121	31.7%
7	Corporates	2 865	400	2 332	186	2 423	96.2%
8	Retail	2 023	323	1 974	119	1 519	72.6%
9	Secured by mortgages on immovable property	901	60	899	19	382	41.6%
10	Exposures in default	502	2	273	1	313	114.4%
11	Higher-risk categories	0	0	0	0	0	0%
12	Covered bonds	0	0	0	0	0	0%
13	Institutions and corporates with a short-term credit assessment	0	0	0	0	0	0%
14	Collective investment undertakings	27	0	27	0	24	88.4%
15	Equity	204	0	201	0	450	224.5%
16	Other items	1 663	55	1 599	55	902	54.6%
17	Total	10 693	8 983	9 883	389	6 318	61.5%

Table 35 - EU CR4\_Credit risk exposure and CRM effects - standardised 31-12-2018

The effect of all CRM techniques was most prominent for 'Institutions' (off-balance-sheet), 'Corporates' (both on- and off-balance-sheet), and 'Exposures in default' (on-balance-sheet), as was the case in the previous years.

The RWA density figures were also basically the same as in 2018. The increase for 'Central governments or central banks' in 2019 was due to higher weighting (from 10 to 25%) for sovereign exposure in euros at UBB.

## Risk weight by exposure class – Standardised approach

The tables below show the net KBC Bank Consolidated exposure (post CCF and CRM) at year-ends 2018 and 2019, calculated using the Standardised approach and broken down by exposure class and risk weight.

EU CR5 Exposure classes 31-12-2019  (in millions of EUR)	Risk weight															Total	Of which unrated
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others		
1 Central governments or central banks	721	0	0	97	24	0	13	0	0	0	0	0	0	0	838	1 693	131
2 Regional government or local authorities	0	0	0	0	208	0	0	0	0	2	0	0	0	0	0	210	205
3 Public sector entities	1	0	0	0	12	0	0	0	0	0	0	0	0	0	3	15	0
4 Multilateral development banks	86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	0
5 International organisations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Institutions	0	0	0	0	102	0	102	0	0	30	0	0	0	0	0	233	696
7 Corporates	0	0	0	0	2	0	114	0	0	2 417	0	0	0	0	0	2 533	2 490
8 Retail	0	0	0	0	0	0	0	0	1 965	0	0	0	0	0	0	1 965	1 965
9 Secured by mortgages on immovable property	0	0	0	0	0	641	359	0	0	53	0	0	0	0	0	1 053	1 053
10 Exposures in default	0	0	0	0	0	0	0	0	0	187	46	0	0	0	0	233	233
11 Higher-risk categories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 Covered bonds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 Collective investment undertakings	0	0	0	0	4	0	0	0	0	20	0	0	0	0	0	25	20
15 Equity	0	0	0	0	0	0	0	0	0	42	0	6	0	0	0	48	48
16 Other items	658	0	0	0	11	0	0	0	0	1 172	0	34	0	0	668	2 543	1 217
17 Total	1 466	0	0	97	363	641	588	0	1 965	3 923	46	40	0	0	1 509	10 639	8 059

Table 36 - EU CR5 Exposure classes 31-12-2019

EU CR5_ Exposure classes 31-12-2018  (in millions of EUR)	Risk weight															Total	Of which unrated
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others		
1 Central governments or central banks	597	0	40	1 248	35	0	15	0	0	0	0	0	0	0	0	1 934	1 267
2 Regional government or local authorities	0	0	0	0	190	0	0	0	0	2	0	0	0	0	0	192	187
3 Public sector entities	5	0	0	0	11	0	0	0	0	0	0	0	0	0	0	16	0
4 Multilateral development banks	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	0
5 International organisations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Institutions	0	0	0	0	275	0	80	0	0	26	0	0	0	0	0	381	216
7 Corporates	0	0	0	0	4	0	123	0	0	2 390	0	0	0	0	0	2 518	2 480
8 Retail	0	0	0	0	0	0	0	0	2 093	0	0	0	0	0	0	2 093	2 093
9 Secured by mortgages on immovable property	0	0	0	0	0	583	284	0	0	52	0	0	0	0	0	918	918
10 Exposures in default	0	0	0	0	0	0	0	0	0	195	79	0	0	0	0	274	274
11 Higher-risk categories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 Covered bonds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 Collective investment undertakings	0	0	0	0	4	0	0	0	0	23	0	0	0	0	0	27	27
15 Equity	0	0	0	0	0	0	0	0	0	34	0	167	0	0	0	201	194
16 Other items	571	0	0	0	10	0	0	0	0	396	0	41	0	0	636	1 654	447
17 Total	1 238	0	40	1 248	529	583	502	0	2 093	3 118	79	208	0	0	636	10 272	8 103

Table 37 - EU CR5\_ Exposure classes 31-12-2018

Much of the exposure was assigned to the unrated bucket. It includes 'Secured by real estate' exposure, which does not require a rating, and obviously 'Retail' exposure. The RWA of KBC's Standardised portfolio has primarily been volume-driven over time.

## Credit exposure and CRM – IRB approach

The tables below show total exposure calculated using the IRB approach, broken down by exposure class.

The exposure classes are those defined for the purpose of regulatory reporting according to the IRB approach<sup>1</sup>:

- **Central governments and central banks:** this category includes claims on public sector entities, regional governments and local authorities as long as they are categorised as 'Sovereign' by the local regulator. Multilateral development banks attracting a 0% risk weighting are included;
- **Institutions:** this category relates mainly to bank exposure. Claims on public sector entities, regional governments and local authorities that do not qualify as 'Sovereign' are also included in this category;
- **Corporates:** this exposure class includes all exposure not belonging to one of the other exposure classes, i.e. mainly exposure to corporate, SME or non-bank financial counterparties;
- **Specialised lending:** exposure to entities created specifically to finance projects or commercial real estate;

<sup>1</sup> It should be noted that the IRB Foundation approach for retail exposure does not exist and that IRB Advanced is the only approach for this exposure class.

- **SMEs (treated as) Corporates:** these are exposures fulfilling the necessary conditions (total annual sales of under 50 million euros) for determining the minimum capital requirements according to the capital weighting formula for corporate SMEs;
- **Retail:** this exposure class includes exposure to private individuals or SMEs, managed in the retail network, for which the total exposure to the counterparty does not exceed 1 million euros. This exposure class is further broken down, depending on whether or not the exposure is secured by (residential or commercial) real estate (including mortgages), and depending on whether the exposure is to private individuals or SMEs;
- **Qualifying revolving retail:** this includes revolving retail exposure, such as exposure to credit cards and overdrafts;
- **Other non-credit obligation assets:** besides 'other assets', this category includes the residual value of leasing transactions and deferred tax assets (DTA);
- **Equity:** this category includes shares and mutual funds.

### EAD covered by the IRB methods by exposure class

This table shows the importance of each IRB method by asset class, taking the EAD of the IRB loan portfolio as a reference. Exceptionally, the EAD used in this table is the EAD after application of the CCF.

EAD covered by the IRB model 31-12-2019	COREP exposure class	EAD %
AIRB	Central governments and central banks	18.74%
	Institutions	4.47%
	Corporates – SMEs	10.45%
	Corporates – Specialised lending	4.26%
	Corporates – Other	16.55%
	Retail – Secured by real estate SMEs	4.65%
	Retail – Secured by real estate non-SMEs	32.30%
	Retail – Qualifying revolving	1.00%
	Retail – Other SMEs	3.38%
	Retail – Other non-SMEs	3.43%
	Equity IRB	1.24%
AIRB	Total	97.12%

Table 38 - EAD covered by the IRB model 31-12-2019 (AIRB)

EAD covered by the IRB model 31-12-2019	COREP exposure class	EAD %
FIRB	Central governments and central banks	50.60%
	Institutions	3.23%
	Corporates – SMEs	10.09%
	Corporates – Specialised lending	12.43%
	Corporates – Other	23.66%
FIRB	Total	2.88%

Table 39 - EAD covered by the IRB model 31-12-2019 (FIRB)



## Credit risk exposure by exposure class and PD range – FIRB approach

These tables contain the net exposure of the material KBC group entities by FIRB exposure class, broken down on a PD scale.

EU CR6_Credit risk exposure by exposure class and PD range – FIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Central governments and central banks	0.00 to <0.15	26 225	0	75%	26 225	0.01%	9	45%	0.4	472	2%	1	
Central governments and central banks		26 225	0	75%	26 225	0.01%	9	45%	0.4	472	2%	1	0

Table 40 - EU CR6\_Credit risk exposure by exposure class and PD range – FIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – FIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Institutions	0.00 to <0.15	140	4	89%	144	0.13%	17	45%	2.5	69	48%	0	
	0.15 to <0,25	960	0	20%	960	0.18%	3	4%	0.0	22	2%	0	
	0.25 to <0,50	2	1	62%	3	0.42%	5	45%	2.5	2	89%	0	
	0.75 to <2.50	311	5	100%	315	0.77%	4	5%	0.1	29	9%	0	
	2.50 to <10.00	16		0%	16	4.67%	13	45%	2.1	30	180%	0	
Institutions	0	1 430	10	91%	1 439	0.36%	41	9%	0.3	153	11%	1	0

Table 41 - EU CR6\_Credit risk exposure by exposure class and PD range – FIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – FIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Corporates - Specialised Lending	0.25 to <0,50	40			40	0.28%	3	44%	2.5	18	46%	0	
	0.50 to <0.75	211	104	77%	291	0.57%	15	45%	2.5	216	74%	1	
	0.75 to <2.50	345	79	78%	406	1.61%	105	44%	2.5	382	94%	3	
	2.50 to <10.00	14	2	91%	15	4.53%	8	45%	2.5	20	132%	0	
	10.00 to <100.00	8			8	18.10%	1	45%	2.5	15	194%	1	
	100.00 (Default)	17	0	75%	17	100.00%	15	44%	2.6			7	
Corporates - Specialised Lending	0	634	185	77%	777	3.48%	146	45%	2.5	651	84%	12	20

Table 42 - EU CR6\_Credit risk exposure by exposure class and PD range – FIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – FIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Corporates - SME	0.00 to <0.15	64	35	61%	86	0.13%	33	44%	2.5	27	31%	0	
	0.25 to <0,50	24	20	69%	38	0.28%	79	42%	2.5	16	41%	0	
	0.50 to <0.75	51	52	61%	82	0.57%	113	43%	2.5	51	62%	0	
	0.75 to <2.50	160	90	52%	207	1.76%	222	42%	2.5	187	90%	2	
	2.50 to <10.00	61	61	50%	92	5.20%	120	41%	2.5	106	115%	2	
	10.00 to <100.00	9	4	61%	12	18.10%	18	39%	2.5	21	177%	1	
	100.00 (Default)	113	1	81%	114	100.00%	65	45%	1.2			51	
Corporates - SME	0	483	264	56%	631	19.88%	644	43%	2.3	407	65%	56	101

Table 43 - EU CR6\_Credit risk exposure by exposure class and PD range – FIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – FIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Corporates - Other	0.00 to <0.15	134	128	71%	225	0.11%	13	45%	2.5	76	34%	0	
	0.25 to <0,50	251	114	73%	334	0.28%	33	45%	2.5	184	55%	0	
	0.50 to <0.75	124	142	58%	207	0.57%	31	44%	2.5	158	77%	1	
	0.75 to <2.50	227	119	43%	278	1.73%	56	44%	2.5	310	111%	2	
	2.50 to <10.00	110	51	58%	140	5.70%	148	44%	2.5	225	161%	4	
	10.00 to <100.00	4	1	31%	5	18.10%	4	43%	2.5	11	238%	0	
	100.00 (Default)	291	0	20%	291	100.00%	59	45%	1.1			131	
Corporates - Other	0	1 142	555	61%	1 480	20.72%	338	44%	2.2	963	65%	138	252

Table 44 - EU CR6\_Credit risk exposure by exposure class and PD range – FIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – FIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Equity	2.50 to <10.00	13			13	4.53%	7	100%	5.0	49	370%	0	
	100.00 (Default)	0			0	100.00%	1	100%	5.0	0	370%	0	
Equity		13			13	5.24%	8	100%	5.0	50	370%	0	

Table 45 - EU CR6\_Credit risk exposure by exposure class and PD range – FIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – FIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Total (all portfolios)		29 927	1 014	63%	30 565	1.53%	1 175	43%	0.5	2 696	9%	208	373

Table 46 - EU CR6\_Credit risk exposure by exposure class and PD range – FIRB approach (31-12-2019)

The change of the FIRB exposures in 2019 is mainly the result of an increase of the 'Central government and central banks' class in the ČSOB CZ SFT portfolio. This exposure class also contains the bulk of the FIRB exposure including sovereign bonds and SFT transactions performed with central banks. The average PD remains stable. Noteworthy is the drop in the average PD from 9.65% to 3.48% for Corporate - Specialised lending. This is due to the sale of the Corporate portfolio of KBC Ireland, which had a very high average PD. This exposure class however is not significant enough to have an impact on the overall Average PD.

## Credit risk exposure by exposure class and PD range – AIRB approach

These tables contain the net exposure of the material KBC group entities by AIRB exposure class, broken down on a PD scale.

EU CR6_Credit risk exposure by exposure class and PD range – AIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Central governments and central banks	0.00 to <0.15	39 505	812	44%	39 859	0.03%	301	25%	3.5	4 187	11%	4	
	0.15 to <0,25	23	5	26%	24	0.20%	20	17%	4.4	5	22%	0	
	0.25 to <0,50	58	8	33%	61	0.31%	31	9%	4.7	9	15%	0	
	0.50 to <0.75	45	17	13%	47	0.56%	149	27%	1.9	18	39%	0	
	0.75 to <2.50	194	248	7%	211	1.80%	24	5%	4.7	30	14%	0	
	2.50 to <10.00	190	113	8%	199	3.40%	202	9%	4.2	67	34%	1	
	10.00 to <100.00	0	0	9%	0	19.69%	7	47%	0.9	0	248%	0	
	100.00 (Default)	8				8	100.00%	3	52%	4.5	0	0%	6
Central governments and central banks		40 023	1 203	32%	40 409	0.08%	705	25%	3.5	4 317	11%	11	10

Table 47 - EU CR6\_Credit risk exposure by exposure class and PD range – AIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – AIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Institutions	0.00 to <0.15	9 559	3 048	37%	10 690	0.07%	1 002	13%	1.7	862	8%	1	
	0.15 to <0,25	462	249	78%	657	0.18%	138	21%	1.4	128	19%	0	
	0.25 to <0,50	736	221	71%	893	0.32%	349	16%	1.4	208	23%	0	
	0.50 to <0.75	18	26	11%	21	0.56%	361	33%	3.4	13	60%	0	
	0.75 to <2.50	595	181	88%	755	1.68%	234	6%	0.4	99	13%	1	
	2.50 to <10.00	280	209	92%	473	5.00%	420	6%	1.0	92	19%	1	
	10.00 to <100.00	5	42	97%	46	14.12%	86	9%	0.9	19	41%	1	
	100.00 (Default)	28			28	100.00%	5	45%	0.0	0	0%	15	
Institutions		11 684	3 977	47%	13 565	0.61%	2 439	13%	1.6	1 420	10%	19	3

Table 48 - EU CR6\_Credit risk exposure by exposure class and PD range – AIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – AIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Corporates - Specialised Lending	0.00 to <0.15	351	9	100%	363	0.10%	21	25%	4.7	88	24%	0	
	0.15 to <0,25	362	107	47%	412	0.20%	25	18%	4.9	104	25%	0	
	0.25 to <0,50	1 283	367	68%	1 532	0.34%	118	16%	3.9	401	26%	1	
	0.50 to <0.75	1 300	479	61%	1 591	0.59%	209	16%	4.1	502	32%	1	
	0.75 to <2.50	3 353	691	65%	3 801	1.42%	800	19%	3.7	1 856	49%	11	
	2.50 to <10.00	682	182	59%	790	4.01%	178	26%	2.7	634	80%	8	
	10.00 to <100.00	57	24	92%	79	16.89%	22	19%	3.4	75	94%	2	
	100.00 (Default)	413	0	100%	416	100.00%	38	34%	2.5	2	1%	193	
Corporates - Specialised Lending		7 802	1 860	64%	8 984	5.91%	1 387	20%	3.8	3 663	41%	217	191

Table 49 - EU CR6\_Credit risk exposure by exposure class and PD range – AIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – AIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Corporates - SME	0.00 to <0.15	2 948	721	21%	3 098	0.11%	8 161	20%	3.7	426	14%	1	
	0.15 to <0,25	1 933	474	23%	2 040	0.19%	2 882	20%	3.5	366	18%	1	
	0.25 to <0,50	3 390	981	23%	3 617	0.35%	7 635	22%	3.3	954	26%	3	
	0.50 to <0.75	2 909	1 282	24%	3 223	0.60%	6 075	25%	2.9	1 196	37%	5	
	0.75 to <2.50	5 696	2 064	26%	6 232	1.48%	11 484	26%	2.8	3 128	50%	23	
	2.50 to <10.00	2 381	623	25%	2 535	4.86%	16 010	24%	2.7	1 595	63%	29	
	10.00 to <100.00	432	153	24%	469	20.49%	1 916	23%	2.6	462	98%	22	
	100.00 (Default)	804	161	1%	805	100.00%	1 749	38%	2.7	322	40%	408	
Corporates - SME		20 492	6 460	24%	22 020	5.25%	53 291	24%	3.1	8 450	38%	491	518

Table 50 - EU CR6\_Credit risk exposure by exposure class and PD range – AIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – AIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Corporates - Other	0.00 to <0.15	16 924	11 098	10%	18 056	0.10%	1 271	12%	1.6	1 770	10%	2	
	0.15 to <0,25	1 826	1 448	15%	2 040	0.20%	401	24%	3.2	566	28%	1	
	0.25 to <0,50	5 843	7 602	17%	7 156	0.33%	1 339	29%	2.5	2 817	39%	7	
	0.50 to <0.75	4 346	4 758	15%	5 070	0.60%	1 877	27%	2.5	2 500	49%	8	
	0.75 to <2.50	8 106	5 180	18%	9 036	1.44%	2 234	27%	2.4	5 956	66%	35	
	2.50 to <10.00	2 759	1 779	18%	3 086	4.86%	4 603	24%	2.0	2 486	81%	36	
	10.00 to <100.00	359	217	22%	406	17.96%	5 742	25%	1.7	509	125%	17	
	100.00 (Default)	1 186	269	19%	1 237	100.00%	373	42%	1.9	300	24%	571	
Corporates - Other		41 350	32 351	15%	46 086	3.61%	16 553	22%	2.1	16 904	37%	678	629

Table 51 - EU CR6\_Credit risk exposure by exposure class and PD range – AIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – AIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Retail - Secured by real estate SME	0.00 to <0.15	2 201	268	46%	2 324	0.10%	15 121	13%		58	3%	0	
	0.15 to <0,25	1 731	156	42%	1 797	0.18%	7 995	14%		75	4%	0	
	0.25 to <0,50	1 691	148	31%	1 737	0.36%	7 061	15%		131	8%	1	
	0.50 to <0.75	980	92	42%	1 019	0.61%	4 894	17%		129	13%	1	
	0.75 to <2.50	1 625	208	30%	1 687	1.37%	6 717	16%		351	21%	4	
	2.50 to <10.00	805	78	31%	829	4.86%	3 719	15%		337	41%	6	
	10.00 to <100.00	304	14	50%	311	24.91%	1 512	13%		169	54%	10	
	100.00 (Default)	91	6	68%	95	100.00%	290	14%		58	61%	41	
Retail - Secured by real estate SME		9 429	970	38%	9 800	2.59%	47 309	15%		1 309	13%	65	27

Table 52 - EU CR6\_Credit risk exposure by exposure class and PD range – AIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – AIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Retail - Secured by real estate non-SME	0.00 to <0.15	30 111	1 283	100%	31 387	0.04%	459 530	17%		703	2%	2	
	0.15 to <0,25	1 274	52	50%	1 300	0.22%	41 830	15%		92	7%	0	
	0.25 to <0,50	15 010	871	92%	15 810	0.35%	267 521	17%		1 792	11%	10	
	0.50 to <0.75	1 056	69	33%	1 079	0.66%	31 379	17%		180	17%	1	
	0.75 to <2.50	11 421	532	88%	11 888	1.34%	166 039	17%		3 262	27%	28	
	2.50 to <10.00	3 051	64	96%	3 112	4.84%	41 630	17%		1 790	58%	26	
	10.00 to <100.00	1 365	9	100%	1 374	31.54%	21 643	18%		1 319	96%	81	
	100.00 (Default)	2 143	1	100%	2 144	100.00%	25 574	34%		1 711	80%	615	
Retail - Secured by real estate non-SME		65 432	2 880	92%	68 094	4.36%	1 055 146	18%		10 850	16%	765	685

Table 53 - EU CR6\_Credit risk exposure by exposure class and PD range – AIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – AIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Retail - Qualifying revolving	0.00 to <0.15	87	930	85%	881	0.05%	527 335	50%		15	2%	0	
	0.15 to <0,25	9	22	55%	21	0.24%	9 580	65%		2	9%	0	
	0.25 to <0,50	19	41	88%	54	0.36%	31 523	52%		5	9%	0	
	0.50 to <0.75	27	47	54%	52	0.67%	31 948	51%		8	15%	0	
	0.75 to <2.50	27	28	89%	52	1.70%	33 275	51%		16	31%	0	
	2.50 to <10.00	18	10	94%	28	5.06%	22 264	50%		18	63%	1	
	10.00 to <100.00	12	3	68%	14	28.32%	10 730	48%		18	122%	2	
	100.00 (Default)	3	0	100%	4	100.00%	2 192	66%		1	20%	2	
Retail - Qualifying revolving		202	1 082	84%	1 106	1.00%	668 847	51%		82	7%	6	5

Table 54 - EU CR6\_Credit risk exposure by exposure class and PD range – AIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – AIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Retail - Other SME	0.00 to <0.15	1 142	689	12%	1 223	0.09%	42 419	28%		67	5%	0	
	0.15 to <0,25	570	380	13%	618	0.19%	18 908	29%		57	9%	0	
	0.25 to <0,50	758	487	15%	830	0.36%	18 689	30%		121	15%	1	
	0.50 to <0.75	813	1 415	17%	1 052	0.63%	62 442	30%		215	20%	2	
	0.75 to <2.50	1 191	1 279	17%	1 414	1.40%	64 087	30%		395	28%	6	
	2.50 to <10.00	1 189	1 924	10%	1 388	4.36%	95 761	24%		404	29%	15	
	10.00 to <100.00	270	124	12%	285	24.07%	12 890	31%		152	53%	23	
	100.00 (Default)	324	25	1%	324	100.00%	8 766	38%		156	48%	160	
Retail - Other SME		6 256	6 322	14%	7 133	6.79%	305 591	29%		1 567	22%	208	239

Table 55 - EU CR6\_Credit risk exposure by exposure class and PD range – AIRB approach (31-12-2019)



EU CR6_Credit risk exposure by exposure class and PD range – AIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Retail - Other non-SME	0.00 to <0.15	2 201	845	97%	3 024	0.04%	188 891	27%		113	4%	0	
	0.15 to <0,25	461	266	60%	620	0.20%	285 289	31%		81	13%	0	
	0.25 to <0,50	652	279	93%	912	0.39%	233 808	33%		208	23%	1	
	0.50 to <0.75	700	37	92%	734	0.72%	157 518	35%		237	32%	2	
	0.75 to <2.50	643	232	87%	845	1.47%	255 263	36%		374	44%	5	
	2.50 to <10.00	786	56	92%	837	4.27%	167 487	40%		514	61%	14	
	10.00 to <100.00	128	4	82%	131	35.00%	88 430	39%		117	90%	17	
	100.00 (Default)	126	0	19%	126	100.00%	673 860	64%		64	50%	80	
Retail - Other non-SME		5 697	1 719	89%	7 230	3.20%	2 050 544	32%		1 708	24%	120	115

Table 56 - EU CR6\_Credit risk exposure by exposure class and PD range – AIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – AIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Equity	0.00 to <0.15	8			8	0.12%	8	90%	5.0	22	290%	0	
	0.15 to <0,25	1			1	0.17%	4	90%	5.0	2	290%	0	
	0.25 to <0,50	0			0	0.28%	4	90%	5.0	0	290%	0	
	0.50 to <0.75	0			0	0.57%	1	90%	5.0	1	370%	0	
	0.75 to <2.50	41			41	1.27%	44	90%	5.0	151	367%	1	
	2.50 to <10.00	79			79	4.85%	39	90%	5.0	280	355%	2	
	100.00 (Default)	1			1	100.00%	3	90%	5.0	2	290%	0	
Equity		129			129	3.80%	102	90%	5.0	458	354%	3	

Table 57 - EU CR6\_Credit risk exposure by exposure class and PD range – AIRB approach (31-12-2019)

EU CR6_Credit risk exposure by exposure class and PD range – AIRB approach (31/12/2019)													
(in millions of EUR)	PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Total (all portfolios)		208 496	58 824	27%	224 556	3.30%	4 151 728	21%	2.8	50 727	23%	2 581	2 422

Table 58 - EU CR6\_Credit risk exposure by exposure class and PD range – AIRB approach (31-12-2019)

Overall, there was a substantial increase in exposure, as explained previously (mainly in the 'Corporate Other' and 'Retail-Secured by real estate non-SME' exposure classes). The Average PD decreased from 3.91% to 3.30% at portfolio level, which was mainly caused by a decrease of the Average PD (6.03% to 4.36%) of the most important exposure class, 'Retail-Secured by real estate non-SME'. This is the result of a substantial write-off in 2019 of the default KBC Ireland home loan portfolio.

## Equities under the simple risk-weight approach – IRB Approach

This table contains the KBC Bank Consolidated exposure. It is limited solely to equities since the simple risk-weight approach is not used for specialised lending. For the latter credit type, own PD and LGD estimates are used.

EU CR10_Equities under the simple risk-weighted approach 31-12-2019							
(in millions of EUR)	Categories	On-balance-sheet amount	Off-balance-sheet amount	Risk weight	Exposure amount	RWAs	Capital requirements
1	Private equity exposures	0	0	190%	0	0	0
2	Exchange-traded equity exposures	26	0	290%	26	74	6
3	Other equity exposures	117	0	370%	117	434	35
4	Total	128	0	0	143	508	41

Table 59 - EU CR10\_Equities under the simple risk-weighted approach 31-12-2019

## Internal modelling

The credit risk models developed by KBC over the years to support decisions in the credit process include Probability of Default (PD), Loss Given Default (LGD) and Exposure At Default (EAD) models, plus application and behavioural scorecards for specific portfolios (retail and SME).

These models are used in the credit process for:

- defining the delegation level for credit approval (e.g., PD models, LGD models, EAD models);
- accepting credit transactions (e.g., application scorecards);
- setting limits (e.g., EL limits);
- pricing credit transactions (predominantly through the use of the RAROC concept);
- monitoring the risk of a (client) portfolio (Risk Signals Databases);
- calculating the internal economic capital;
- calculating the regulatory capital;
- generating input for other credit risk models (e.g., behavioural scores as pooling criteria for the retail portfolio).

The internal rating process depends on the exposure class:

	Type of model	Batch or manual process	Frequency	Overruling possible
<b>(i) central governments and central banks</b>	Statistical expert-based models	Manual process	Annual, or when specific information affecting the credit rating becomes available	Yes
<b>(ii) institutions</b>	Statistical default/non-default models based on objective and subjective input	Manual process	Annual, or when specific information affecting the credit rating becomes available	Yes
<b>(iii) corporate, including SMEs, specialised lending and purchased corporate receivables</b>	Statistical default/non-default models based on objective and subjective input	Batch (for corporates and SMEs) and manual process (for corporates, specialised lending and purchased corporate receivables)	Batch: monthly	Yes
	Statistical expert-based models		Manual: annual, or when specific information affecting the credit rating becomes available	
	Generic flexible rating tool			
<b>(iv) retail</b>	Statistical default/non-default models based on objective inputs	Batch process	Monthly	No

Table 60 - Internal Rating Process 31-12-2019

The 'equities' exposure class is not included in this table since to calculate the RWA we do not use a PD for this. We use the 'simple risk-weighted approach', which means that, depending on the type of equity, a percentage is simply applied to the exposure (190%, 290% or 370%).

## Probability of Default models

Probability of Default (PD) is the likelihood that an obligor will default on its obligations within a one-year time horizon, with default being defined in accordance with European regulations. The PD is calculated for each client or for a portfolio of transactions with similar attributes (pools in retail portfolios).

There are several approaches to estimating PDs (from purely objective to more subjective methods); however, all have four steps in common:

**Step 1:** The segment for which a model will be built is defined (segmentation of the portfolio). It is important to strike a good balance between the homogeneity of the segment, the exposure, the number of clients and the number of default events. Having too many models will lead to additional operational risks in the credit process, smaller and less reliable data samples and high maintenance costs. On the other hand, the predictability of the models will go down if the segments are less homogeneous. Once the segment has been defined, the data sample on which the model development will be based can be created. This usually requires some 'cleansing' of the available data (for instance, handling missing values and outliers). KBC has built its rating models mainly on internal data.

**Step 2:** This entails ranking the clients in the targeted segment according to their creditworthiness. Depending on the amount of data available and its characteristics (subjective or objective), specific techniques are used in order to create a ranking model.

- Statistical default/non-default models based on objective inputs: Rankings are derived purely mechanically with no subjective input, using regression techniques. At KBC, this method is only used in the retail segment where objective data is plentiful (e.g., behavioural information);
- Statistical default/non-default models based on objective and subjective input: These are very similar to the purely objective models, but also use subjective input entered by a credit adviser (for instance, management quality). At KBC, this method is used to rank large corporate clients, for example;
- Statistical expert-based models: Rankings are based on quantitative and qualitative input, but due to the small number of observed default events, regression is applied to predict expert assessments of the creditworthiness of the clients, rather than their default/non-default behaviour. At KBC, this method is used to rank borrowers in the 'Asset-based real estate lending' segment, for example;
- Generic flexible rating tool: This is a template that is used by 'graders' to justify and document the given rating class. In this template, the most relevant risk indicators are given a score and ranked in order of importance as a basis for a final rating.

**Step 3:** The ranking score is calibrated to a probability of default.

**Step 4:** The probability of default is mapped to a rating class. There is a unique rating scale at KBC for all segments, known as the KBC Master Scale.

Once all the steps have been taken and the model has been built and implemented, the quality of the PD models developed is measured by:

- statistical analysis: variable distributions (means, standard deviations), rating distributions, statistical powers of variables and (sub)models;

- the number of overrulings: if users frequently overrule the output of a model, this indicates that the model could be improved;
- the soundness of model implementation and policies, more specifically as regards system access, system security, integrity of data input, etc.;
- the available documentation (user manual, technical reports, expert opinion, etc.).

## Loss Given Default models

Loss Given Default (LGD) is a measure of the loss that a bank would suffer if an obligor defaults. It can be expressed as an amount or as a percentage of the expected amount outstanding at the time of default (EAD).

In general, there are many ways of modelling the LGD, such as:

- Market LGD: this is observed from market prices of defaulted bonds or marketable loans soon after the actual default event;
- Workout LGD: this is determined by the sum of cashflows resulting from the workout and/or collections process, discounted to the time of default and expressed as a percentage of the estimated exposure at default.

The LGD models currently used at KBC are all workout LGDs. The models developed are (methodologically) based on historical recovery rates and cure rates per collateral type or per pool (segmentation-based approach).

A major challenge posed by the Basel regulations is the 'downturn requirement'. The underlying principle is that the LGD is correlated to the PD, and loss rates will be higher in a year with many defaults. This effect has been demonstrated in a number of studies. However, as these studies almost exclusively used market LGD, they are not necessarily relevant for workout LGD.

One explanation for the difference in cyclicity between market LGD and workout LGD is the fact that workout LGD is based on a recovery process that can take several years. In most cases, the workout period will thus include periods of both upturn and downturn economic conditions.

Market LGD is based entirely on information one month after default. In downturn economic conditions, the market will be hit by a large supply of defaulted bonds, depressing prices. The classic market mechanism based on supply and demand may prove to be a stronger driver for 'downturn' recovery rates than the macroeconomic conditions that led to the higher number of defaults.

Data collected from the credit crisis helps KBC to model downturn LGD based on its own portfolios and workout processes.

## Exposure At Default (EAD) models

KBC uses historical information that is available on exposures of defaulted counterparties to model EAD. The EAD model is used to estimate the amount that is expected to be outstanding when a counterparty defaults in the course of the next year.

Measuring EAD tends to be less complicated and generally boils down to clearly defining certain components (discount rate, moment of default and moment of reference) and gathering the appropriate data. In most cases, EAD equals the nominal amount of the facility, but for certain facilities (e.g., those with undrawn commitments) it includes an estimate of future drawings prior to default.

## Pooling models

A pool is a set of exposures that share the same attributes (characteristics). Pooling can be based on continuous estimates of PD, LGD and EAD or on other relevant characteristics.

- If pooling is based on continuous estimates of PD, LGD and EAD the pooling merely consists of aggregating the continuous estimates into PD, LGD and EAD bands. The added value of pooling is that exposure can be processed on an aggregate basis, which enhances calculation performance;
- If pooling is based on other criteria, loans are aggregated into pools based on these criteria. Since criteria need not be continuous (for example, whether or not there is a current account, which only has two categories) the resulting PD, LGD and EAD estimates are not necessarily on a continuous scale.

## Group-wide framework for dealing with model uncertainty

While KBC makes extensive use of modelling to steer its business processes, it aims to do so in a cautious manner. In the majority of cases, parameters predicted by models do not perfectly match those that are ultimately observed. This has a number of reasons, the most significant of which are:

- **Intrinsic randomness** - For practical purposes, some aspects of the future are intrinsically unpredictable. Conceptually, a model can only ever predict non-random aspects of future developments;
- **Unstable context** - Models operate on the presumption that the future will be structurally identical, or at least very similar to the past and present. In practice this may not always be the case;
- **Data quantity** - Our knowledge of the past is limited, so models are based on incomplete information;
- **Data quality** - Model data may be incomplete, unreliable, biased or otherwise deficient;
- **Methodology** - The method used to derive a model may be unable to capture the true relationships between predictors and the estimated parameter.

Once identified, one can classify the adverse effects of such model deficiencies into two categories, i.e. model predictions can be inaccurate (or biased) and imprecise. Bias refers to a structural deviation of model-predicted parameters from their actual values such as systematic over- or underestimations. Imprecision results in a spread of model parameter predictions around the actual values.

To ensure that risk parameters are not underestimated in the majority of cases, a Margin of Conservatism (or MoC) Framework accounts for uncertainty in PD, LGD and EaD estimates by means of conservative corrections to parameter estimates.

When (re)designing, recalibrating or back-testing models, this MoC framework is applied. When the modeller (or any other stakeholders involved) encounters deficiencies that lead to errors in the PD, EaD and LGD estimates, these deficiencies should be corrected via an appropriate or, in some cases, a conservative adjustment. In some cases, a deficiency can be rectified, entirely removing any contribution to model uncertainty and/or bias it may have originally caused. When this is the case, it need no longer be reported in the list of identified deficiencies and the MoC does not need to be quantified. If no rectification is possible, however, estimation errors need to be translated into an MoC that will ultimately be incorporated into the final conservative PD, LGD and EaD parameter estimates. The estimated overall level of uncertainty expressed via the MoC is clearly communicated to any stakeholder using the model output.

In exceptional cases, the appropriate degree of conservatism may not be achieved by including an MoC in the transactional ratings. In that case, an RWA correction can be imposed.

## Role of validation

The term 'four-eyes principle' refers to a precautionary measure that requires at least two people to review a particular activity. Application of this principle is essential in risk measurement, as it allows us to reduce measurement risk. It takes two forms, namely 'verification' and 'validation'.

Verification is a process during which a second pair of eyes assesses whether a measurement-related activity has been performed in accordance with prescribed policies/guidelines/procedures and/or best practices.

Consequently, as a rule, a person cannot verify their own work. Verification can be linked to data gathering, data processing, as well as the implementation of a model, but not to modelling itself.

Validation is a specific – more stringent – form of verification, aimed at challenging an internally designed model, and can only be performed by members of an independent validation unit. Validation is key to the challenging process, as it provides an independent view of the internal model.

The internal models measuring required capital (Pillar 1 and 2) and their sub-measurements are subject to formal model validation.

## Checks on rating models

Every model is back-tested on a yearly basis in accordance with the following principles:

- An annual back-test cannot include model changes;
- Fixed tests are defined with fixed thresholds;
- The scope of a back-test is always the implemented model (even if a new model has already been approved internally and/or externally);
- The resulting outcome of a back-test is either 'redesign needed' or 'no redesign needed', the latter possibly supplemented with a decision to recalibrate the model.

Back-tests are subject to the four-eyes principle described above, which means that the outcome of the test is challenged by the independent validation unit.

## Key models used for the most important portfolios

Asset classes 31-12-2019 (in millions of EUR)	Key IRB models					
	Corporates	Financial Institutions	Central governments	Asset-backed real estate	Private individuals	Non-regulated retail
Central governments & central banks			•			
Institutions		•				
Corporates	•			•		
Corporates-SME	•			•		
Retail-SME						•
Retail-non-SME					•	

Table 61 - Asset classes key IRB models 31-12-2019

## KBC Bank Consolidated NPL disclosure

In the context of the ECB's intensified supervisory work on non-performing loans (NPL), specific guidance to banks on non-performing loans was published in March 2017. This guidance includes expectations with regard to NPL-related disclosures, additional to the information required under Part Eight of the CRR (Article 431).

The purpose of the disclosure is to provide market participants with meaningful information on the credit institution's asset quality and to allow better insight into the distribution and level of collateralisation of the credit institution's NPL.

These four templates are based on figures at KBC Bank Consolidated level and also include cash balances with central banks and other demand deposits in the gross carrying amounts in order to be in line with FINREP table 18.

### Template 1: Credit quality of forborne exposures

Credit quality of forborne exposures 31-12-2019  (in millions of EUR)		Forborne exposures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collaterals received and financial guarantees received on forborne exposures	
		Performing forborne	Non-performing forborne			On performing forborne exposures	On non-performing forborne exposures		Of which: Collateral and financial guarantees received on non-performing exposures with forbearance measures
				Of which defaulted	Of which impaired				
1	Loans and advances	936	2 140	2 137	2 137	-13	-503	2 376	133
2	Central banks	0	0	0	0	0	0	0	0
3	General governments	0	1	1	1	0	-1	0	0
4	Credit institutions	0	0	0	0	0	0	0	0
5	Other financial corporations	5	3	3	3	0	-1	4	0
6	Non-financial corporations	295	735	734	734	-7	-253	709	74
7	Households	636	1 401	1 399	1 399	-5	-249	1 664	59
8	Debt Securities	0	0	0	0	0	0	0	0
9	Loan commitments given	15	13	13	13	0	0	1	0
10	Total	951	2 153	2 151	2 151	-13	-503	2 377	133

Table 62 - Credit quality of forborne exposures 31-12-2019



### Template 3: Credit quality of performing and non-performing exposures by past due days

Credit quality of performing and non-performing exposures by past due days 31-12-2019		Performing exposures			Non-performing exposures									
			Not past due or Past due ≤ 30 days	Past due > 30 days ≤ 90 days		Unlikely to pay that are not past-due or past-due ≤ 90 days	Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year ≤ 2 years	Past due > 2 year ≤ 5 years	Past due > 5 year ≤ 7 years	Past due > 7 years	Of which defaulted	Of which impaired
(in millions of EUR)														
1	Loans and advances	191 105	190 627	478	5 464	2 489	300	524	326	582	548	695	5 462	5 460
2	Central banks	30 273	30 273	0	0	0	0	0	0	0	0	0	0	0
3	General governments	5 919	5 919	0	12	9	0	1	0	1	0	1	12	12
4	Credit institutions	7 839	7 839	0	30	0	0	0	0	0	30	0	30	30
5	Other financial corporations	5 496	5 496	0	82	24	0	38	4	1	2	13	82	82
6	Non-financial corporations	64 172	63 895	277	2 887	1 375	99	326	157	315	301	314	2 886	2 886
7	Of which: SMEs	26 407	26 360	48	1 184	358	58	65	87	251	91	274	1 183	1 183
8	Households	77 406	77 205	200	2 453	1 081	201	158	165	266	215	367	2 451	2 450
9	Debt Securities	43 987	43 987	0	7	0	0	0	0	7	0	0	7	7
10	Central banks	297	297	0	0	0	0	0	0	0	0	0	0	0
11	General governments	38 090	38 090	0	0	0	0	0	0	0	0	0	0	0
12	Credit institutions	3 739	3 739	0	0	0	0	0	0	0	0	0	0	0
13	Other financial corporations	1 457	1 457	0	0	0	0	0	0	0	0	0	0	0
14	Non-financial corporations	403	403	0	7	0	0	0	0	7	0	0	7	7
15	Off-balance-sheet exposures	48 440			307								307	307
16	Central banks	0			0								0	0
17	General governments	1 372			0								0	0
18	Credit institutions	2 728			3								3	3
19	Other financial corporations	4 470			3								3	3
20	Non-financial corporations	33 257			295								295	295
21	Households	6 614			5								5	5
22	Total	283 531	234 613	478	5 778	2 489	300	524	326	589	548	695	5 776	5 775

Table 63 - Credit quality of performing and non-performing exposures by past due days 31-12-2019

## Template 4: Performing and non-performing exposures and related provisions

Performing and non-performing exposures and related provisions 31-12-2019  (in millions of EUR)		Nominal amount					Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions					Accumulated partial write-off	Collaterals and financial guarantees received			
		Performing exposures			Non-performing exposures		Performing exposures - Accumulated impairment and provisions			Non-performing exposures - Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						
			of which: stage 1	of which: stage 2		of which: stage 2	of which: stage 3		of which: stage 1	of which: stage 2	Of which defaulted		of which: stage 2	of which: stage 3		On performing exposures
1	Loans and advances	191 105	174 731	16 148	5 464		5 460	-380	-131	-249	-2 475		-2 474	88	115 730	2 624
2	Central banks	30 273	30 273	0	0		0	0	0	0	0		0	0	24 035	0
3	General governments	5 919	5 803	115	12		12	-2	-1	0	-9		-9	0	2 817	2
4	Credit institutions	7 839	7 669	170	30		30	-1	-1	0	-29		-29	0	1 720	0
5	Other financial corporations	5 496	5 303	193	82		82	-8	-5	-3	-53		-53	0	2 041	15
6	Non-financial corporations	64 172	53 460	10 693	2 887		2 886	-257	-97	-160	-1 607		-1 607	76	27 970	983
7	Of which: SMEs	26 407	22 527	3 880	1 184		1 183	-106	-38	-67	-464		-464	56	13 408	418
8	Households	77 406	72 223	4 976	2 453		2 450	-112	-26	-86	-777		-776	12	57 147	1 623
9	Debt Securities	43 987	43 913	46	7		7	-7	-5	-2	-6		-6	0	39	0
10	Central banks	297	297	0	0		0	0	0	0	0		0	0	0	0
11	General governments	38 090	38 090	0	0		0	-3	-3	0	0		0	0	0	0
12	Credit institutions	3 739	3 739	0	0		0	-1	-1	0	0		0	0	0	0
13	Other financial corporations	1 457	1 435	0	0		0	-1	-1	0	0		0	0	0	0
14	Non-financial corporations	403	351	46	7		7	-2	0	-2	-6		-6	0	39	0
15	Off-balance-sheet exposures	48 440	43 692	4 748	307		307	-30	-13	-17	-107		-107		9 789	113
16	Central banks	0	0	0	0		0	0	0	0	0		0		0	0
17	General governments	1 372	1 348	24	0		0	-1	-1	0	0		0		406	0
18	Credit institutions	2 728	2 649	79	3		3	0	0	0	0		0		131	0
19	Other financial corporations	4 470	4 349	121	3		3	-1	0	0	-2		-2		332	0
20	Non-financial corporations	33 257	29 051	4 207	295		295	-26	-10	-15	-105		-105		7 319	113
21	Households	6 614	6 297	317	5		5	-3	-2	-2	-1		-1		1 601	1
22	Total	283 531	262 336	20 942	5 778		5 775	-417	-149	-268	-2 588		-2 587		125 559	2 737

Table 64 - Performing and non-performing exposures and related provisions 31-12-2019

In 2019, there was a significant decrease in non-performing exposures mainly due to the write-offs (-0.9 billion euros for KBC Bank Consolidated) on non-performing portfolios across different entities (of which an internal write-off on Residual Mortgage Balances in Ireland is the main contributor decreasing non-performing accumulated impairments by 489 million euros).

In template 3, the time buckets have been slightly modified in order to ensure they match the current FINREP time buckets. As soon as the new FINREP requirements are in place (second quarter of 2020), the requested time buckets will be provided.

## Template 9: Collateral obtained by taking possession and execution processes

Collateral obtained by taking possession accumulated 31-12-2019		Value at initial recognition	Accumulated impairment, accumulated negative changes
(in millions of EUR)			
1	Property Plant and Equipment (PP&E)	0	0
2	Other than Property Plant and Equipment	83	-21
3	<i>Residential immovable property</i>	22	-3
4	<i>Commercial Immovable property</i>	60	-18
5	<i>Movable property (auto, shipping, etc.)</i>	1	0
6	<i>Equity and debt instruments</i>	0	0
7	<i>Other</i>	0	0
8	Total	83	-21

Table 65 - Collateral obtained by taking possession and execution processes 31-12-2019

# Counterparty Credit Risk

## Definition and objectives

KBC defines counterparty credit risk (CCR) as the default risk related to the non-payment or non-performance of a counterparty in a professional transaction, due to that party's insolvency or lack of willingness to pay or perform. Professional transactions are transactions concluded with the intermediation of professional dealers or traders, and include foreign exchange swaps, interest rate/equity swaps, future rate agreements, (reverse) repos, and interest rate options.

The credit risk management framework for professional transactions has been implemented to ensure an effective risk management process is in place throughout the KBC group. It covers counterparty credit risk (pre-settlement risk, settlement risk), country risk and wrong-way risk, and also lays down standards relating to a number of areas, including, inter alia, collateral management, limit setting, measurements and wrong-way risk.

The objectives of counterparty credit risk management are:

- Monitoring counterparty credit risk;
- Developing frameworks and risk standards related to CCR management in the KBC group;
- Enhancing CCR processes, models and methodology;
- Ensuring that appropriate CCR management processes are in place throughout the organisation;
- Reporting on CCR and informing senior management on CCR;
- Challenging business decisions that have an impact on CCR positions;
- Providing risk advice.

## Limit setting

The risk standard on limit setting describes how counterparty risk is measured and monitored. KBC Group NV sets risk limits (both pre-settlement and settlement) on each counterparty. The risk incurred on the derivative portfolio with this counterparty is imputed on the limit on a real-time basis. The real-time limit control system allows dealers to check limit availability at any time.

## Wrong-way risk

Wrong-way risk is defined as the risk that occurs when exposure to a counterparty is adversely correlated with the credit quality of that counterparty. Two types of wrong-way risk can be identified:

- Specific wrong-way risk arises when a transaction is structured in such a way that the exposure to the counterparty is positively correlated with probability of default of that counterparty;
- General wrong-way risk occurs when the probability of default of the counterparty is positively correlated with the exposure due to changes in general market risk factors (such as interest rates, inflation or exchange rates).

Wrong-way risk is monitored at product, region and industry level, both in individual trades and at portfolio level.

## Scope

The counterparty credit risk section of the reports covers all OTC derivatives. The Security Financing Transactions are only included in counterparty credit risk tables CCR2, CCR3 and CCR8, and in the Credit Risk section of this report. The tables below show the counterparty credit risks for all entities referred to in the scope description of the credit risk disclosures. The UBB derivative portfolio is not material and is therefore omitted from the CCR tables of this report.

## Regulatory treatment

KBC Group NV uses an approved internal model method (IMM) for exposures originating in KBC Bank NV and CBC Banque NV. The internal model method covers the portfolio of foreign exchange (FX) derivatives and interest rate (IR) derivatives. All other portfolios are calculated using the Current Exposure Method (or CEM) for CCR capital calculations.

EU CCR1_Analysis of CCR by approach 31-12-2019	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
(in millions of EUR)						
Mark-to-market	2 162	1 357			1 680	938
IMM (for derivatives and SFT)			2 806	1.4	3 928	1 163
Of which derivatives			2 806	1.4	3 928	1 163
Total						2 101

Table 66 - EU CCR1\_Analysis of CCR by approach 31-12-2019

Total RWA increased with 10% from 1 906 million euros to 2 101 million euros. The increase was caused by an increase in exposure on interest rate swaps.

## Credit risk mitigation techniques

This section covers credit risk mitigation by means of collateral provided to cover the counterparty risk arising from derivative transactions and the lending portfolio. The tables show the EAD covered, broken down into different portfolios and different types of credit risk mitigation.

### Close-out netting

Close-out netting is one of the main risk mitigation techniques. The aim of close-out netting is to allow, in the event of default, a timely termination and settlement of the net value of all trades with the defaulted counterparty. Close-out netting consists of two components:

- Close-out, which is the right to terminate transactions with the defaulted counterparty and therefore to cease any contractual payment;
- Netting, which is the right to offset amounts due to a termination of individual contracts to determine a net position.

Close-out netting will reduce counterparty risk as it will reduce pre-settlement risk. This is governed by a legal agreement, the most common of which is the ISDA Master Agreement. Netting will only be applied if its legal effectiveness and enforceability is assured.

## Collateral

Besides close-out netting, collateral is used as a separate credit risk mitigation technique. The exchange of collateral is governed by the Credit Support Annex (CSA), an addendum to the ISDA Master Agreement. The CSA stipulates the mechanics of the collateralisation process, i.e. it will determine the risk characteristics of the exposure. It will not only determine whether a CSA is unilateral or bilateral, it will also determine the eligible collateral, the mechanics and timing of the collateral transfers, etc.

Before collateral is taken into account as a valid risk-mitigant, it has to fulfil a number of requirements. Most importantly, collateral must be eligible for risk mitigation in the regulatory capital calculations and legal comfort must have been obtained regarding the ownership of the collateral in all relevant jurisdictions.

The impact of close-out netting and collateral on counterparty credit risk is shown in table CCR5A.

EU CCR5-A_Impact of netting and collateral held on exposure values 31-12-2019	Gross positive fair value or net carrying amount (1)	Netting benefits (2)	Netted current credit exposures (3)	Collateral held (4)	Net credit exposure (5)
(in millions of EUR)					
Derivatives	10 456	6 660	3 796	1 006	2 790
<b>Total</b>	<b>10 456</b>	<b>6 660</b>	<b>3 796</b>	<b>1 006</b>	<b>2 790</b>

(1) Gross positive fair value or net carrying amount is the exposure value before Credit Risk Mitigation (CRM).

(2) Netting Benefits: Reduction in the gross positive fair value or net carrying amount due to the use of legally enforceable netting agreements in the application of Part Two, Title III, Chapter 4 and Chapter 6 of the CRR.

(3) Netted current credit exposure: The larger of zero and the market 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 these transactions in insolvency or liquidation.

(4) Collateral held: Impact of collateral on the netted current exposure, including volatility adjustments in the application of Part Two, Title III, Chapter 4 and Chapter 6 of the CRR.

(5) Net Credit Exposure: This is the credit exposure after considering the benefits from both legally enforceable netting agreements and collateral agreements. This value differs from the EAD value disclosed in table EU CCR1, due to the other parameters for the calculation of the regulatory exposure values not being disclosed in table CCR5A.

Table 67 - EU CCR5-A\_Impact of netting and collateral held on exposure values 31-12-2019

The reported collateral held (in table CCR5A) covers only collateral held for exposures measured using the Current Exposure Method. The entire exposure covered by collateral is provided below in table CCR5B.

EU CCR5-B_Composition of collateral for CCR exposure 31-12-2019	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
(in millions of EUR)						
Cash	0	1 524	2	3 870	187	396
Bonds	0	290	683	804	941	904
<b>Total</b>	<b>0</b>	<b>1 814</b>	<b>685</b>	<b>4 674</b>	<b>1 128</b>	<b>1 300</b>

Table 68 - EU CCR5-B\_Composition of collateral for CCR exposure 31-12-2019

## Central clearing

Central clearing is used to reduce counterparty credit exposures; an overview of the exposure cleared at a central clearing counterparty is provided in table CCR8. KBC only clears exposure with Qualified Central Clearing Parties (QCCP).

EU CCR8_Exposures to central counterparties 31-12-2019		
(in millions of EUR)	EAD post CRM	RWAs
Exposures to QCCPs (total)		90
Exposures to trades at QCCPs (excluding initial margin and default fund contributions)	1 388	28
Of which OTC derivatives	1 011	20
Of which SFTs	377	8
Segregated initial margin	1423	0
Prefunded default fund contributions	-	62

Table 69 - EU CCR8\_Exposures to central counterparties 31-12-2019

## Credit derivative exposure

The table below provides an overview of KBC Group's Credit Derivative Exposure.

Credit derivative exposure (in millions of EUR)	2019			2018		
	Credit derivative hedges		Other Credit derivatives	Credit derivative hedges		Other Credit derivatives
	Protection bought	Protection sold		Protection bought	Protection sold	
Notionals						
Index CDS	4	-	-	4	-	-
Total Notionals	4			4		
Fair Values						
Positive Fair Value	0	-	-	-	-	-
Negative Fair Value	-	-	-	-0	-	-

Table 70 - EU CCR6\_Credit derivative exposure

## Counterparty risk by regulatory risk-weighting approach

KBC uses three regulatory risk-weighting approaches. The table below provides a breakdown of the CCR exposure by exposure class and risk weight (according to the standardised approach).

EU CCR3_Standardised Approach - CCR exposure by regulatory portfolio and risk 31-12-2019	Risk weight												Total	Of which unrated	
	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Other				
Exposure classes (in millions of EUR)															
Institutions		1 388												1 388	1 388
Total		1 388												1 388	1 388

Table 71 - EU CCR3\_Standardised Approach - CCR exposure by regulatory portfolio and risk

In line with the EBA requirements, insight into the derivatives portfolio broken down by asset class and by probability of default (PD) is provided in table CCR4.

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Central governments and central banks	0.00 to <0.15	1	0.01%	1	45.00%	1	0	4.23%
<b>Central governments and central banks</b>		<b>1</b>	<b>0.01%</b>	<b>1</b>	<b>45.00%</b>	<b>1</b>	<b>0</b>	<b>4.23%</b>

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Corporates - Other	0.00 to <0.15	66	0.12%	63	45.00%	2	23	35.40%
	0.25 to <0.50	65	0.28%	54	45.00%	3	37	57.53%
	0.50 to <0.75	28	0.57%	53	45.00%	3	22	78.85%
	0.75 to <2.50	23	1.28%	60	45.00%	1	23	98.89%
	2.50 to <10.00	10	4.67%	195	45.00%	2	14	146.23%
	10.00 to <100.00	1	18.10%	13	45.00%	2	2	237.41%
	100.00 (Default)	1	100.00%	1	45.00%	2	-	0.00%
<b>Corporates - Other</b>		<b>193</b>	<b>1.10%</b>	<b>434</b>	<b>45.00%</b>	<b>2</b>	<b>121</b>	<b>62.80%</b>

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Corporates - SME	0.00 to <0.15	5	0.12%	32	45.00%	2	2	28.55%
	0.25 to <0.50	4	0.28%	71	45.00%	2	2	41.27%
	0.50 to <0.75	7	0.57%	122	45.00%	2	4	57.66%
	0.75 to <2.50	14	1.61%	335	45.00%	2	12	88.22%
	2.50 to <10.00	2	5.47%	69	45.00%	3	2	125.13%
	10.00 to <100.00	0	18.10%	3	45.00%	1	0	217.39%
	100.00 (Default)	0	100.00%	7	45.00%	1	-	0.00%
<b>Corporates - SME</b>		<b>33</b>	<b>1.70%</b>	<b>637</b>	<b>45.00%</b>	<b>2</b>	<b>22</b>	<b>67.45%</b>

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Corporates - Specialised Lending	0.00 to <0.15	3	0.14%	3	45.00%	5	2	59.61%
	0.25 to <0.50	0	0.28%	4	45.00%	5	0	78.29%
	0.50 to <0.75	31	0.57%	21	45.00%	4	30	97.53%
	0.75 to <2.50	21	1.38%	110	45.00%	5	27	131.64%
	2.50 to <10.00	1	4.53%	8	45.00%	4	1	164.88%
	10.00 to <100.00	0	18.10%	1	45.00%	1	0	234.53%
	100.00 (Default)	1	100.00%	3	45.00%	5	-	0.00%
<b>Corporates - Specialised Lending</b>		<b>57</b>	<b>2.37%</b>	<b>150</b>	<b>45.00%</b>	<b>4</b>	<b>61</b>	<b>107.50%</b>

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Institutions	0.00 to <0.15	171	0.07%	36	45.00%	2	51	29.61%
	0.25 to <0.50	50	0.18%	5	45.00%	3	32	63.86%
	0.50 to <0.75	1	0.28%	3	45.00%	5	0	82.32%
	0.75 to <2.50	20	0.79%	3	45.00%	3	24	119.05%
	2.50 to <10.00	0	3.31%	1	45.00%	2	0	156.88%



10.00 to <100.00	0	18.10%	1	45.00%	4	0	260.45%
<b>Institutions</b>	<b>242</b>	<b>0.16%</b>	<b>46</b>	<b>45.00%</b>	<b>2</b>	<b>107</b>	<b>44.40%</b>

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
<b>Total (all portfolios)</b>		<b>525</b>	<b>0.84%</b>	<b>1 265</b>	<b>45.00%</b>	<b>2</b>	<b>311</b>	<b>59.29%</b>

Table 72 - EU CCR4A\_IRB Foundation - CCR exposures by portfolio and PD scale

Besides the IRB Foundation portfolio, KBC also uses an IRB Advanced approach.

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Central governments and central banks	0.00 to <0.15	545	0.04%	36	26.09%	4	75	13.80%
	0.15 to <0.25	12	0.17%	3	26.33%	2	3	25.15%
	0.25 to <0.50	3	0.26%	3	52.57%	3	2	69.48%
	0.75 to <2.50		0.54%	1	43.15%	5	0	100.23%
<b>Central governments and central banks</b>		<b>560</b>	<b>0.04%</b>	<b>43</b>	<b>26.25%</b>	<b>4</b>	<b>81</b>	<b>14.38%</b>

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Corporates - Other	0.00 to <0.15	450	0.09%	867	35.91%	3	145	32.17%
	0.15 to <0.25	94	0.19%	77	22.28%	3	22	23.89%
	0.25 to <0.50	105	0.31%	139	32.99%	2	41	38.67%
	0.50 to <0.75	59	0.61%	92	42.82%	2	43	72.05%
	0.75 to <2.50	120	1.30%	236	47.81%	2	130	107.76%
	2.50 to <10.00	26	4.91%	149	47.41%	2	45	169.04%
	10.00 to <100.00	2	14.26%	11	56.32%	1	5	261.74%
	100.00 (Default)	6	100.00%	14	36.71%	2	-	0.00%
<b>Corporates - Other</b>		<b>862</b>	<b>1.15%</b>	<b>1585</b>	<b>36.61%</b>	<b>3</b>	<b>430</b>	<b>49.81%</b>

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Corporates - SME	0.00 to <0.15	12	0.09%	106	31.74%	3	2	15.42%
	0.15 to <0.25	17	0.17%	74	20.40%	4	3	17.40%
	0.25 to <0.50	14	0.38%	138	45.35%	2	6	44.71%
	0.50 to <0.75	32	0.59%	102	41.59%	2	17	53.06%
	0.75 to <2.50	26	1.31%	225	56.26%	2	23	88.89%
	2.50 to <10.00	8	4.21%	104	52.77%	2	10	125.45%
	10.00 to <100.00	1	22.07%	10	50.26%	2	2	200.33%
	100.00 (Default)	8	100.00%	8	25.80%	3	0	0.00%
<b>Corporates - SME</b>		<b>119</b>	<b>0.83%</b>	<b>767</b>	<b>40.96%</b>	<b>2</b>	<b>64</b>	<b>53.63%</b>

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Corporates - Specialised Lending	0.00 to <0.15	52	0.15%	2	23.00%	5	14	25.96%
	0.15 to <0.25	78	0.17%	9	22.94%	5	21	26.58%
	0.25 to <0.50	151	0.32%	28	20.44%	3	44	28.86%
	0.50 to <0.75	97	0.62%	27	27.06%	3	50	51.38%
	0.75 to <2.50	63	1.13%	82	32.03%	3	44	70.47%

2.50 to <10.00	41	3.22%	10	29.69%	4	43	102.79%
100.00 (Default)	2	100.00%	1	58.84%	1	0	0.00%
<b>Corporates - Specialised Lending</b>	<b>484</b>	<b>1.05%</b>	<b>159</b>	<b>24.88%</b>	<b>4</b>	<b>215</b>	<b>44.30%</b>

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Institutions	0.00 to <0.15	1 819	0.07%	227	55.26%	3	748	41.09%
	0.15 to <0.25	132	0.18%	32	55.98%	3	94	71.38%
	0.25 to <0.50	73	0.33%	53	56.08%	2	60	82.99%
	0.75 to <2.50	33	1.31%	51	55.92%	1	41	122.24%
	2.50 to <10.00	22	4.81%	45	53.03%	1	38	168.87%
<b>Institutions</b>		<b>2 079</b>	<b>0.16%</b>	<b>408</b>	<b>55.32%</b>	<b>3</b>	<b>980</b>	<b>47.14%</b>

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Retail - Other SME	0.00 to <0.15	1	0.10%	97	49.16%		0	10.18%
	0.15 to <0.25	2	0.20%	52	43.60%		0	14.22%
	0.25 to <0.50	1	0.35%	66	26.87%		0	14.66%
	0.50 to <0.75	1	0.60%	41	43.29%		0	31.04%
	0.75 to <2.50	2	1.61%	72	24.90%		1	29.35%
	2.50 to <10.00	2	3.52%	64	25.31%		0	31.80%
	10.00 to <100.00	1	25.06%	56	10.85%		0	18.87%
<b>Retail - Other SME</b>		<b>9</b>	<b>2.92%</b>	<b>448</b>	<b>32.40%</b>		<b>2</b>	<b>22.12%</b>

31-12-2019 (in millions of EUR)	PD Bucket	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
<b>Total (all portfolios)</b>		<b>4 113</b>	<b>0.79%</b>	<b>3 410</b>	<b>45.78%</b>	<b>3</b>	<b>1 771</b>	<b>43.04%</b>

Table 73 - EU CCR4B\_IRB Advanced Approach - CCR Exposures by portfolio and scale

## Credit value adjustment

Credit Valuation Adjustment (CVA) is a regulatory capital charge to cover the volatility of expected losses due to counterparty credit risk exposure related to over-the-counter (OTC) derivatives. The CVA capital charge is calculated according to the regulatory Standardised formula.

EU CCR2_Credit valuation adjustment capital charge 31-12-2019 (in millions of EUR)	Exposure value	RWAs
All portfolios subject to the Standardised method	2 382	740
<b>Total subject to the CVA capital charge</b>	<b>2 382</b>	<b>740</b>

Table 74 - EU CCR2\_Credit valuation adjustment capital charge 31-12-2019

The exposure value increased by 20% year-on-year, which resulted in a 35% increase in CVA RWA's. The increase is mainly due to market changes.

# Market Risk Management (trading)

We define market risk as the potential negative deviation from the expected value of a financial instrument (or portfolio of such instruments) due to changes in the level or in the volatility of market prices, e.g., interest rates, exchange rates and equity or commodity prices. This risk relates solely to positions taken in our different dealing rooms.

## Strategy and processes

Our strategic objectives in undertaking trading activities are to offer sound and appropriate financial products and solutions to our clients in order to help them manage their risks and access capital (including funding of bank activities) and to engage in certified market making activities. Our focus on client-driven or client-facilitation-related business leaves us with some residual market risks, which are necessary to enable us to fulfil our intermediary role towards clients, as well as with positions resulting from our certified market making activities. This is because we have to rely on portfolio hedging using standard market products, with the result that a certain amount of residual risk remains on the books (since standard market products have standard sizes and expiry dates, an exact hedge of bespoke client trades is not always possible).

Our focus is on trading in interest rate instruments, while our activity on the FX markets has traditionally been limited. In order to ensure the tradability of these hedging positions, the following principles apply:

- Trading activity is limited to linear and non-linear interest rate, foreign exchange and equity products, as well as to bonds/bond futures and (government) debt;
- Commodity-related products are only allowed on a back-to-back basis;
- Credit-related products are only allowed on a back-to-back basis. All activity in CDOs is prohibited.

## Scope of market risk management

We are exposed to market risk in our trading books, when servicing our customers in the money and capital markets, and funding the banking activities. Whilst we service our clients across a broad range of products to facilitate their hedging needs, residual positions have predominantly interest rate risk as the interest rate risk of bespoke client deals are less readily exactly hedged with standard market products compared to other risk types. These activities are carried out by our dealing rooms in Belgium, the Czech Republic, Hungary, Bulgaria and Slovakia, as well as via a minor presence in the UK and Asia. The effective completion of the Global Trading Project during 2019 (as described in the 2018 KBC Risk Report) means that, wherever possible and practical, the residual trading positions of our foreign entities are systematically transferred to KBC Bank NV reflecting the fact that the group's trading activity is managed centrally both from a business and a risk management perspective. Consequently, KBC Bank NV holds about 95% of the trading-book-related regulatory capital of KBC Group NV.

For the sake of completeness, it should be mentioned that, although the remaining three legacy business lines (i.e. reverse mortgages, insurance derivatives and fund derivatives) have effectively been wound down, they still attract some

market risk capital charges by virtue of the current regulatory framework (accounting for about 1% of the total regulatory capital charges for market risk set out in the table at the end of this section).

## Governance

The group's trading activity is managed centrally both from a business and a risk management perspective. The centralisation of trading risk management implies close co-operation among all the risk management units at both group and local level. This close co-operation allows consistent reporting to group senior management through the Group Markets Committee (GMC), which is chaired by the Group CRO and includes senior representatives from line management, risk management and other departments. It manages market risk and addresses the operational and counterparty risks of the dealing rooms. It keeps track of structural trends, monitors risk limits and may decide to impose corrective actions.

The GMC, which receives relevant reports on an ad hoc and biweekly basis, meets formally every four weeks in order to enable the KBC group to take decisions regarding trading risk on the basis of accurate and up-to-date information.

The Group Risk Appetite, including the strategic objectives with regard to (trading) market risk tolerance, is determined by the Board of Directors by means of an annual review. The GMC decides upon and periodically reviews a framework of limits and policies on trading activities that is consistent with this Group Risk Appetite. This framework is submitted to the Board of Directors for approval.

The risk limit framework consists of primary limits and a series of secondary limits. Any breaches of the two primary Group limits (i.e. the KBC Group HVaR limit and the Group RWA limit) have to be approved by the Board of Directors (there were no breaches in 2018 and 2019). Primary entity limit overruns must be approved by the Group Executive Committee. However, it is important to point out that, other than KBC Bank NV, all the entity limits are rather small. This is because, now that the Global Trading Project mentioned in the 2018 KBC Risk Report has been effectively completed, wherever possible and practical, the residual trading positions of our foreign entities are systematically transferred to KBC Bank NV.

All secondary limit overruns must be approved by the GMC. However, depending on the type of limit and its purpose, the GMC can delegate smaller limit breaches and/or breaches (referred to as 'level 1 overrun delegation') for a limited period of time to a lower level. It should be noted that in addition to, say, the Financial Markets CEO or the Chief Dealer, a relevant CRO also has to approve these level 1 overruns.

Risk Markets keeps a log of all limit overruns, with full details regarding the overruns (type of limit, duration of the overrun, amount of the overrun, delegation level, explanation of the overrun, etc.). Overruns outside level 1 delegation are presented at the following GMC meeting with a request for ratification. If the GMC refuses to ratify the overrun, the overrun in question must be reduced as fast as market conditions allow.

## Market risk objectives and processes

The objective of our market risk management is to measure, report and advise on the market risk of the aggregate trading position at group level, to ensure that activities are consistent with the group's risk appetite. This function includes pro-active and re-active aspects. In its pro-active role, the risk function analyses the results of value and risk calculations, market developments, industry trends, new modelling insights, changes in regulations, etc. and draws up advice for the Group Markets Committee (GMC) with a view to changing or refining measurement methods, limits, hedging methods or

positions. The re-active role involves compiling the necessary external and internal reports, issuing advice on business proposals and monitoring and advising on the risks attached to the positions.

We monitor and manage the risks of the positions by means of:

- a risk limit framework consisting of a hierarchy of limits and early warning indicators;
- day-to-day and month-to-day stop loss limits at both desk and trader level;
- a large variety of controls (including parameter reviews, daily reconciliation processes, and analyses of the material impact of proxies);
- internal assessments;
- a comprehensive stress test framework.

This risk framework consists of a hierarchy of limits. Whereas HVaR calculations serve as a primary risk measurement tool, risk concentrations are monitored via a series of secondary limits including equity concentration limits, FX concentration limits and basis-point-value limits for interest rate risk and basis risk. The specific risks associated with a particular issuer or country are also subject to concentration limits. For the non-linear positions, we monitor the 'greeks' via 'soft' limits, in addition to formal scenario and stress scenario limits involving multiple shifts of underlying risk factors (preferred in our limit framework as these scenario grids give much more insight into the effect of shifts in the risk factors of the option positions than the separate values of the 'greeks', as it reflects the actual P&L impact, using full revaluation, of such shifts). Some composite and/or illiquid instruments, which cannot be modelled in an HVaR context, are subject to nominal and/or scenario limits.

The concept behind these secondary limits is that they are set at a level so that they operate as 'early warning signals' to facilitate discussion at (senior) management level. This is preferred to having higher, hard limits that never get broken. Therefore, the secondary limits are more flexible than the primary ones, especially with regard to delegation authorities (see the 'Governance' section).

## The VaR model

The VaR method is the principal tool for managing and monitoring market risk exposures in the trading book. Accordingly, VaR is the primary building block of KBC's market risk management framework and regulatory capital calculations.

VaR is defined as an estimate of the amount of economic value that might be lost on a given portfolio due to market risk over a defined holding period, with a given confidence level. The measurement only takes account of the market risk of the current portfolio and does not attempt to capture possible losses due to counterparty default or operational losses, nor does it capture the effects of further trading or hedging.

The risk factors used in the VaR calculations cover all the main market risk drivers for the trading books, namely interest rates, interest rate volatility, basis risk, credit spreads, exchange rates, exchange rate volatility, equity, equity volatility, equity dividends and inflation rates. Specific (issuer) risk is calculated using the Standardised approach. To compute shifts in the risk factors, the Historical Value-at-Risk method is used (HVaR). This means that the actual market performance is used in order to simulate how the market could develop going forward, i.e. this method does not rely on assumptions regarding the distribution of price fluctuations or correlations, but is based on patterns of experience in the past.

KBC's HVaR methodology for regulatory capital calculations is based on a 10-day holding period and a 99% confidence level, with historical data going back 500 working days, i.e. it equals the fifth worst outcome (1% of 500 scenarios, with

an equal weighting for each scenario). The 500-day historical data set is a daily moving window (with a two-day lag which serves as a data-cleaning buffer), i.e. movements in the markets each day they are open are added to the data set and the oldest scenarios removed. The outcome for a 10-day holding period is calculated in three steps. The historical daily movements in the risk factors used in the VaR calculations are scaled so that they are relevant for the current day's levels, the movement generated for the given risk factor is then scaled up by the square root of 10 to obtain a movement for a 10-day holding period, these shifts in the risk factors are then applied to the position on a given date for the scope that the HVaR is being calculated for (using full revaluation) and the corresponding P&Ls computed to produce the outcome for that scenario.

The Management HVaR calculation matches the regulatory methodology except that a one-day holding period is used as it is more intuitive for senior management and is more in line with P&L reporting, day-to-day management, stop losses and back-testing. An HVaR is calculated on a daily basis at consolidated group level and desk level as well as for the very small amount of positions at the trading entities worldwide that cannot be transferred to KBC Bank NV for materiality and/or regulatory reasons.

As with any model, there are a certain number of uncertainties/deficiencies. However, the model is subject to regular review and improvements. There were no major developments to report in relation to the HVaR model during 2019.

The table below shows the Management HVaR (99% confidence interval, one-day holding period, historical simulation) for the linear and non-linear exposure at all the dealing rooms of the KBC group that can be modelled by HVaR.

Market risk (management HVaR) (in millions of EUR)	2019	2018
Average for 1Q	7	6
Average for 2Q	7	5
Average for 3Q	8	5
Average for 4Q	6	5
As at 31 December	5	6
Maximum in year	9	7
Minimum in year	4	4

*Table 75 - Market risk (management HVaR)*

A breakdown of the risk factors (averaged over the full year) in KBC's HVaR model is shown in the table below. Please note that the equity risk stems from the equities desk, and also from KBC Securities.

Breakdown by risk factor of trading HVaR for the KBC group (Management HVaR) (in millions of EUR)	Average for 2019	Average for 2018
Interest rate risk	7.0	5.2
FX risk	0.8	0.4
FX options risk	0.5	0.2
Equity risk	0.7	0.6
Diversification effect	-2.0	-1.3
Total HVaR	7.0	5.1

*Table 76 - Breakdown by risk factor of trading HVaR for the KBC group (Management HVaR)*

We have provided an overview of the derivative products under Note 4.8 in the 'Consolidated financial statements' section of the 2019 Annual Report of KBC Group NV.

## Regulatory capital

The capital requirements for trading risk at year-ends 2018 and 2019 are shown in the table below. It shows the regulatory capital requirements by risk type, as assessed by the internal model. Business lines not included in the internal model calculations are measured according to the Standardised approach and likewise shown by risk type. The following two sections give more detail regarding the drivers of the Regulatory capital for both the Approved Internal Model and the Standardised Approach.

Trading regulatory capital requirements by risk type (in millions of EUR)		Interest rate risk	Equity risk	FX risk	Commodity risk	Total
<b>31-12-2019</b>						
Market risks assessed by internal model	HVaR	38	6	7	0	51
	SVaR	79	24	20	0	122
Market risks assessed by the Standardised approach		8	7	19*	0	34
Total		125	36	46	0	207
<b>31-12-2018</b>						
Market risks assessed by internal model	HVaR	46	7	4	0	58
	SVaR	99	46	8	0	153
Market risks assessed by the Standardised approach		22	5	18	0	45
Total		167	58	30	0	256

\* In accordance with COREP requirements, this figure includes the 16 million euros capital requirements for FX in the banking book although this does not stem from trading activities

Table 77 - Trading regulatory capital requirements by risk type

## Approved Internal Models (AIMs)

Up until the end of 2019, we used the AIMs of KBC Bank NV in Belgium and ČSOB in the Czech Republic to calculate the AIM-based regulatory capital requirements. However, as mentioned in the 'Scope of market risk management' section of this report, 2019 witnessed the effective completion of the Global Trading Project. Recognising that effectively all of the market risk of the Czech Republic dealing room is always transferred to Brussels, the Czech National Bank have given their permission for the Czech Republic AIM to be terminated on 1 January 2020. In order to be complete in our reporting information, we include information and related Capital requirements for the ČSOB AIM but, as is shown in the following tables, the related Capital requirements by the end of 2019 dropped to very low levels.

The two AIMs in use until the end of 2019 are also used for the calculation of Stressed VaR (SVaR), which is one of the CRD III Regulatory Capital charges that entered into effect at year-end 2011. The SVaR, like the HVaR, measures the maximum loss from an adverse market movement within a given confidence level (99%) and for a given holding period (10 days). The methodology is identical to that used for HVaR calculations, though the 500 scenarios used for calculating the SVaR are not based on the most recent past, but consist of 250 'regular' historical scenarios from the period which resulted in the most negative VaR figure for that entity (the 'stressed' period), and 250 antithetic ('mirror') scenarios, obtained by reversing these 250 regular scenarios. The stressed period which is used for calculating the SVaR has to be calibrated at least once a year (checked monthly to ensure the period is still valid). As at the date of preparation of this report, the period relevant to the measurement of SVaR during 2019 and the period that will be used from 2020 onwards are shown in the table below:

Approved Internal Model	2019	2018
KBC Bank NV AIM	Mar 2016 – Mar 2017	Jun 2008 – Jun 2009
ČSOB (Czech Republic) AIM	NA (model terminated)	Aug 2016 – Jul 2017

Table 78 - Approved Internal Model

In line with EBA guidelines, the following three tables show the HVaR and SVaR components of the two internal models at the end of 2019, the RWA flow between 2018 and 2019 and the range of HVaR and SVaR for the two internal models during 2019.

EU MR2-A_Market risk under the IMA (Internal Model Approach) (in millions of EUR)				
	KBC Bank NV AIM		ČSOB AIM	
	RWAs	Capital requirements	RWAs	Capital requirements
<b>1 VaR (higher of values a and b)</b>	628	50	7	0.6
(a) Previous day's VaR (Article 365(1) of the CRR (VaRt-1))	0	15	0	0.3
(b) Average of the daily VaR (Article 365(1)) of the CRR on each of the preceding 60 business days (VaRavg) x multiplication factor (mc) in accordance with Article 366 of the CRR	0	50	0	0.6
<b>2 SVaR (higher of values a and b)</b>	1 513	121	13	1.1
(a) Latest SVaR (Article 365(2) of the CRR (SVaRt-1))	0	42	0	0.7
(b) Average of the SVaR (Article 365(2) of the CRR) during the preceding 60 business days (SVaRavg) x multiplication factor (ms) (Article 366 of the CRR)	0	121	0	1.1
<b>5 Other</b>				
<b>6 Total</b>	2 142	171	20	1.6

Table 79 - EU MR2-A\_Market risk under the IMA (Internal Model Approach)

EU MR2-B_RWA flow statements of market risk exposures under the IMA (in millions of EUR)							
	a	b	c	d	e	f	g
	VaR	SVaR	IRC	CRM	Other	Total RWAs	Total capital requirements
<b>RWAs end of 2018</b>	722	1 912				2 634	211
Regulatory adjustment							
RWAs at the previous quarter-end (end of the day)							
Movement in risk levels							
Model updates/changes							
Methodology and policy							
Acquisitions and disposals							
Foreign exchange movements							
Other	-87	-385				-472	-38
RWAs at the end of the reporting period (end of the day)	635	1 527				2 162	173
Regulatory adjustment							
<b>RWAs at the end of 2019</b>	635	1 527				2 162	173

Table 80 - EU MR2-B\_RWA flow statements of market risk exposures under the IMA



**EU MR3\_IMA values for trading portfolios for 2019  
(in millions of EUR)**

	KBC Bank NV AIM	ČSOB AIM
<b>VaR (10-day 99%)</b>		
1 Maximum values	29	9.2
2 Average values	21	1.5
3 Minimum values	14	0.1
4 End of 2019	16	0.2
<b>SVaR (10-day 99%)</b>		
5 Maximum values	44	13.6
6 Average values	38	2.6
7 Minimum values	30	0.1
8 End of 2019	42	0.7

*Table 81 - EU MR3\_IMA values for trading portfolios for 2019*

The 38-million-euro (472 million euros RWA) decrease in AIM-generated capital between 2019 and 2018 (as shown in table MR2-B) was mainly due to the consolidation of the residual positions held at KBC Bank NV and ČSOB which more correctly reflects the market risk (and related capital requirements) of KBC Group. On the one hand, conceptually, a long and short position previously held at both entities used to be separately subject to scenarios (i.e. the paradoxical situation of a position having a simultaneously lower and higher value) meaning that capital requirements can be too high. On the other hand, consolidation means that extreme scenarios at the entities will more quickly affect HVaR and SVaR (i.e. the fifth worst scenario) which would cause an increase in capital requirements. The very small remaining ČSOB AIM-related regulatory capital by the end of 2019 is shown in table MR2-A.

The evolution of the Global Trading Project is reflected in table MR3 – the maximum values of ČSOB AIM HVaR and SVaR were both situated in 1Q2019 with both values decreasing to very low levels especially after the September IT release which constituted the last part of the Global Trading Project (the automatic transferral of ČSOB FX trading book positions to KBC Bank NV).

## Standardised Regulatory Capital Requirements

The Standardised approach is used to calculate the regulatory capital requirements for the very small positions that remain at the local KBC entities (for practical, legal or regulatory reasons) and for the business lines not included in the HVaR calculations.

This approach sets out general and specific risk weightings per type of market risk (interest risk, equity risk, foreign exchange risk and commodity risk). The resulting regulatory capital calculated using the Standardised approach for 2019 is shown in the table below. Please note that, out of the 34 million euros in capital requirements shown in the table, the total capital requirements of the trading book positions amount to approximately 18 million euros if the 16-million-euro capital requirements for FX in the banking book, which do not stem from trading activities, are removed (reported as market risk in this table to line up with COREP requirements), with interest rate risk accounting for just under half of this amount. By comparing this figure with table MR2-B, it can be concluded that about 90% of trading book capital requirements are calculated using the Approved Internal Model Approach.

**EU MR1\_Market risk under the Standardised approach  
(in millions of EUR)**

	a	b
	RWAs	Capital requirements
Outright products	391	31.2
1 Interest rate risk (general and specific)	104	8.3
2 Equity risk (general and specific)	47	3.7
3 Foreign exchange risk	240	19.2
4 Commodity risk	0	0.0
Options	35	2.8
5 Simplified approach	30	2.4
6 Delta-plus method	5	0.4
9 Total	425	34.0

Table 82 - EU MR1\_Market risk under the Standardised approach

## Stress testing

As the VaR model cannot encompass all potential extreme events, the VaR calculations are supplemented by stress tests which reflect the impact of exceptional circumstances and events with a low degree of probability. Stress tests help to verify the adequacy of established limits and assigned capital and are used as an additional input for informed decisions about how much risk senior management is willing to take (acting as a tool that helps to evaluate risk appetite).

For the Financial Markets activities, both historical and hypothetical stress tests are performed on a weekly basis, whereby risk factors relating to interest rates (IR), exchange rates (FX) and equity (EQ) prices and their volatilities are shifted. These scenarios model inter alia parallel interest rate shifts, steepening/flattening of interest rate curves, changes in basis swap spreads and changes in IR volatility, as well as shifts in FX and EQ prices and their volatilities.

The historical stress tests that are carried out use a number of historical scenarios, going back as far as 1987, as shown in the following table.

Events	Events Period (start to end)
1987 market crash	06-10-1987 – 02-11-1987
1st Gulf War	27-07-1990 – 06-08-1990
1994 bond sell-off	25-02-1994 – 18-04-1994
Mexican crisis	20-12-1994 – 06-01-1995
Czech koruna turmoil	01-05-1997 – 30-05-1997
Asian crisis	20-10-1997 – 18-11-1997
Russian crisis	27-08-1998 – 08-09-1998
Brazilian crisis	04-01-1999 – 01-02-1999
11-Sep-01	10-09-2001 – 17-09-2001
2nd Gulf War	03-03-2003 – 24-03-2003
Early credit crunch	09-07-2007 – 20-08-2007
Credit crisis peak	14-01-2008 – 18-03-2008
Lehman Brothers crisis	05-09-2008 – 24-11-2008
Early peripheral sovereign crisis	31-03-2010 – 31-05-2010
Greek crisis, further austerity package	13-06-2011 – 22-07-2011
August 2011 stock markets fall	26-07-2011 – 06-09-2011
Belgian sovereign crisis	13-09-2011 – 05-12-2011
Syriza sweeps to power	29-12-2014 – 26-01-2015

Switzerland abandons euro cap	13-01-2015 – 21-01-2015
Renewed Greek default fears	29-05-2015 – 03-08-2015
Brexit	20-06-2016 – 30-06-2016
De-pegging pressure on Czech koruna	20-12-2016 – 31-01-2017
De-pegging of Czech koruna	15-03-2017 – 11-04-2017

*Table 83 - Historical stress tests*

Concerning the hypothetical stress tests, the validity of the calibrated shifts are checked by comparing them with the most relevant regulatory stress tests. However, unlike the case with regulatory stress tests – which typically only use market shifts in one direction – KBC also calculates the result for a given shift in the opposite direction and takes the worst-case result as this better reflects the dynamic nature of trading book positions (i.e. residual positions can benefit from, as well as be vulnerable to, a stressed market environment due to being either a long-term or short-term risk factor – typically more than half the scenarios shown in the above historical stress test table result in a positive P&L for KBC's dealing rooms).

The worst-case scenarios for both the hypothetical and historical stress tests, together with the respective losses, are then reported at the GMC meetings. These results are accompanied by an analysis of these worst-case scenarios, providing the GMC with an insight into potential vulnerabilities in the portfolio. In addition, a more in-depth report on stress test results is submitted to the GMC on a semi-annual basis. This report also includes a review of the stress tests (as regards mix and checking that they remain up-to-date and relevant). During 2019, the Risk department's conclusion that no significant changes to the trading book market risk stress tests were necessary for that year was confirmed by the GMC (a minor change was made to the KBC Securities stress test framework).

In all the stress tests conducted during the year, the worst-case scenario results were comfortably covered by the market-risk regulatory capital requirements.

## Back-testing

Back-testing plays a crucial role in assessing the quality and accuracy of the HVaR model, as it compares model-generated risk measures to daily profit or loss figures. The concept behind back-testing the HVaR model is the expectation that the calculated HVaR will be larger than all but a certain fraction of the trading outcomes, where this fraction is determined by the confidence level assumed by the HVaR measure. In line with regulations, back-testing at KBC uses the 99% confidence level and one-day HVaR holding period. A loss in excess of the HVaR is referred to in the Capital Requirements Regulation (CRR) as an overshooting.

The one-day profit used in back-tests can in theory be defined in a number of ways, depending on the HVaR model property being tested, but can broadly be split into two types. The first type of back-test, often called a 'risk theoretical back-test' compares the one-day HVaR to the risk theoretical P&L obtained by applying the next day's market movements to the end-of-day trading positions using the risk systems. The second type of back-test compares the one-day HVaR to the trading outcome obtained by the Middle Office (often referred to as '**real back-testing**'). The CRR further sub-divides real back-testing into '**hypothetical back-testing**' (comparing the HVaR to the daily economic P&L of the Middle Office, while keeping the portfolio unchanged and removing the effect of fees, commission and net interest – sometimes referred to as the 'hands-off P&L') and '**actual back-testing**' (the same as 'hypothetical back-testing', but allowing for trades applicable on a given position date). The CRR stipulates that all banks with approved internal models (AIMs) must apply two back-tests to their positions. In September 2016, following discussions with the ECB as part of their Targeted Review of Internal Model (TRIM), the two required back-tests were designated as the 'hypothetical back-

test' and the 'actual-back-test'. However, the Czech National Bank stipulates that the two required back-tests for the ČSOB AIM should be the 'risk theoretical back-test' and the 'actual back-test'.

The table below shows the number of overshootings for the applicable back-tests for the KBC Bank and ČSOB AIMS in 2018 and 2019. Overshootings are reported to the relevant risk committees and the applicable regulator, i.e. the National Bank of Belgium/Czech National Bank/European Central Bank, on both an ad hoc and quarterly basis. Please note that back-testing is performed on a wide variety of portfolios for which an HVaR limit is defined. This provides a good indication of the HVaR model performance for a specific (product) portfolio. In general, the number of overshootings on a more granular level increases as there is less diversification. However, allowing for this, the number of overshootings for all levels underpinned the quality of the HVaR model.

Table showing the number of overshootings for the two Approved Internal Models (AIM) in 2019 and 2018.

KBC Bank AIM			ČSOB AIM							
Hypothetical	Actual		Risk theoretical	Date	HVaR (mln CZK)	P&L (mln CZK)	Actual	Date	HVaR (mln CZK)	P&L (mln CZK)
2019	0	0	2	15-08-2019	-1.9	-2.2	2	18-11-2019	-1.2	-5.3
				30-12-2019	-2.0	-12.9		19-12-2019	-2.2	-25.6
2018	0	0	0	NA	NA	NA	0	NA	NA	NA

Table 84 - Overshootings Approved Internal Models

As can be seen from the table above and the graphs below, the KBC Bank AIM has not had any outliers for the last two years. However, although there were no outliers for the ČSOB AIM during 2018, there were two risk theoretical and two actual outliers in 2019 during the closing stages of the Global Trading Project from when the only positions left in the ČSOB AIM were the FX Banking book positions – previously 'noise' – compared to the P&L movements in the trading book positions. The transfer of the market risk of the trading books to Brussels led to small absolute values of HVaR and thus small changes in the FX Banking book P&L (previously easily covered by the trading book driven HVaR) can conceptually easily cause outliers, even though such outliers are not relevant from a trading point of view as they are FX Banking book positions. The larger outliers in December were caused by year-end effects (i.e. violent shifts in short-term rates due to banks trying to optimise their CZK deposits over year-end).

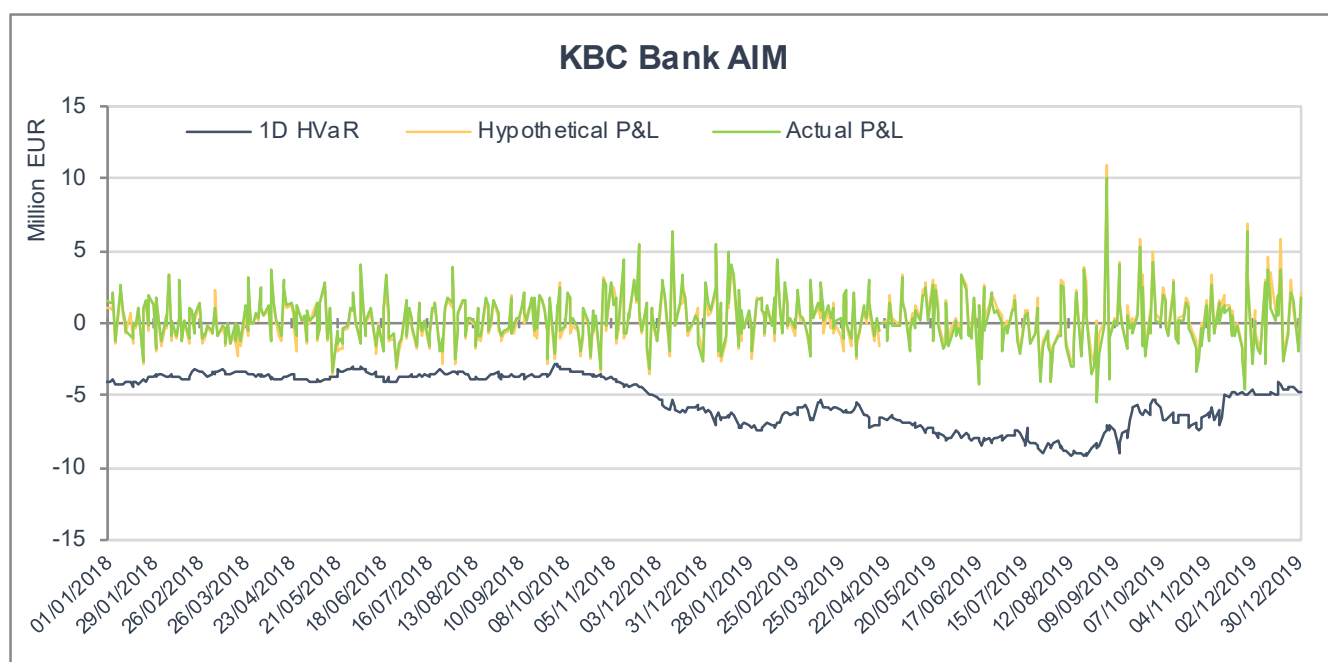


Figure 5 - EU MR4\_One-day HVaR with the daily P&L results during 2018 and 2019 at KBC Bank AIM

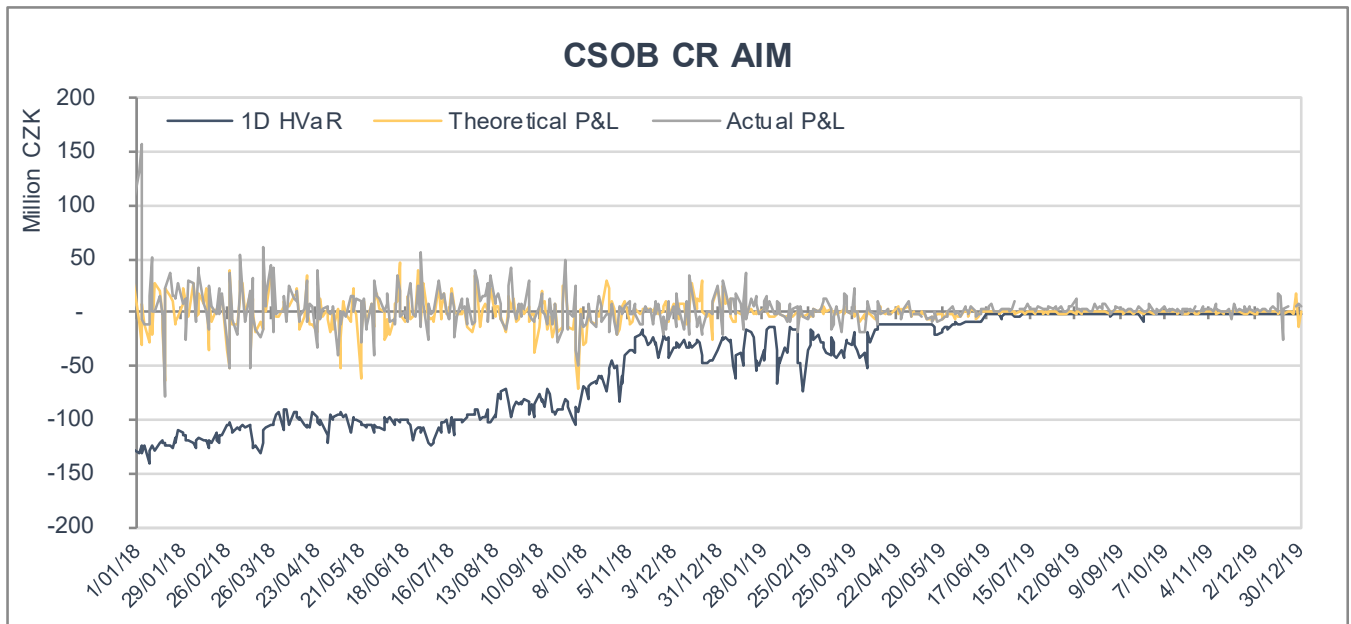


Figure 6 - EU MR4\_One-day HVaR with the daily P&L results during 2018 and 2019 at ČSOB CZ AIM

## Validation and reconciliation

VaR implementation is validated by an independent validation entity. In order to guarantee the quality of transaction data used in the risk calculation engine, a daily reconciliation process has been set up. The transaction data generated by the source system are reconciled with the data used in the risk calculation engine.

Furthermore, the VaR method is reviewed and subjected to a validation exercise by the KBC Risk Validation Unit at least once a year. In addition, the VaR model is audited on a regular basis.

## Valuation

One of the building blocks of sound risk management is prudent valuation. A daily independent middle-office valuation of front-office positions is performed. Whenever the independent nature or the reliability of the valuation process is not guaranteed, we perform a monthly parameter review. Where applicable, adjustments to the fair value are made to reflect close-out costs, adjustments for less liquid positions or markets, mark-to-model-related valuation adjustments, counterparty risk and liquidity risk.

KBC applies the IFRS fair value hierarchy which gives priority to the use of quoted prices in an active market whenever they are available. If there are no price quotes available, KBC determines the fair value by using a model based on observable or unobservable inputs. In line with the IFRS principles, the use of observable inputs is maximised, whereas the use of unobservable inputs is minimised. It is important to point out that, from a practical point of view, the vast majority of the open positions held in the trading books of KBC Group are valued using either quoted prices or prices that can be directly derived from exclusively observable input parameters.

Examples of observable inputs are the risk-free rate, exchange rates, stock prices and implied volatility. Valuation techniques based on observable inputs can include discounted cashflow analysis, reference to the current or recent fair value of a similar instrument, or third-party pricing, provided that the third-party price is in line with alternative observable

market data. Unobservable inputs reflect KBC's own assumptions about the assumptions that market participants would use in pricing the asset or liability (including assumptions regarding the risks involved). Unobservable inputs reflect a market that is not active. For example, proxies and correlation factors can be considered to be unobservable in the market.

The KBC valuation methodology of the most commonly used financial instruments is summarised in Note 1.0 of the 2019 Annual Report of KBC Group NV.

Within KBC, valuation models are validated by an independent Risk Validation Unit. In addition, the Group Executive Committee of KBC established a Group Valuation Committee (GVC) to ensure that KBC Group NV and its entities are compliant with all the relevant regulatory requirements concerning the valuation of financial instruments that are measured at fair value. For this purpose, the GVC monitors the consistent implementation of the KBC Valuation Framework, which consists of several policies including the Group Market Value Adjustments Policy and the Group Parameter Review Policy. Furthermore, the GVC meets twice per quarter to approve significant changes in valuation methodologies (including but not limited to models, market data and input parameters) or deviations from group policies for financial instruments measured at fair value. The GVC consists of members of Group Finance, Market Risk Management, and Middle Office units.

# Non-Financial Risks

## Operational risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes and systems, human error or sudden external events, whether man-made or natural. Operational risks include process risk, legal risk, outsourcing risk, information security risk, information technology risk and model risk, but exclude business, strategic and reputational risks.

This definition is in line with the definition in the Basel II Capital Accord and the Capital Requirements Directive. Information on legal disputes is provided in Note 5.7 of the 'Consolidated financial statements' section of the 2019 Annual Report of KBC Group NV.

Operational Risk lies at the core of any company's day-to-day business operations, meaning it is directly linked to the building blocks of a company (people, processes and systems). In addition, it covers risks emerging from actions that specifically target the operations of the organisation (for instance: intentional fire, external fraud or theft), as well as sudden damaging and/or destructive external events that affect the company in its day-to-day operations and that are non-financial in nature, such as war or a terrorist attack.

Given the broad scope of operational risk, it includes several sub-risk types, in line with Basel and industry standards. As such, operational risk management at KBC is a common responsibility of several stakeholders within the three lines of defence.

## Operational risk governance

KBC has a single, global framework for managing operational risk across the entire group. The development and implementation of this framework is supported by an extensive operational risk governance model covering all sub-types of operational risk in all material entities of the group.

The Group risk function is primarily responsible for defining the operational risk management framework. The development and implementation of this framework is supported by an extensive operational risk governance model covering all sub-types of operational risk in all entities of the group.

The Competence Centre for Operational Risk, which consists of independent risk experts at both group and local level, works with other expert functions in specific domains to cover the full spectrum of operational risk. Therefore, a working environment is created where risk experts cooperate with other experts in different domains (such as information risk management, business continuity and disaster recovery, anti-fraud, legal, tax and accounting). The competence centre defines the operational risk management framework and the minimum standards for operational risk management processes for the group. It provides oversight and advice on the strength of the control environment for keeping the operational risk profile in line with the risk appetite and informs senior management and oversight committees of the operational risk profile.

The Group Internal Control Committee (GICC) supports the Executive Committee in monitoring and strengthening the quality and effectiveness of KBC's internal control system.

This committee meets on a quarterly basis and is chaired by the Group CRO. It ensures alignment with and co-operation between the three Lines of Defence as regards the internal control system and operational risk management. The GICC coordinates the annual process of reporting on the annual Internal Control State of the KBC group.

In addition to the key stakeholders at group level (Group Risk, including Competence Centres for Operational Risk and Information Risk Management, Group Compliance including the Anti-Fraud Unit, Group Legal and Corporate Audit), KBC's core markets are structurally represented by the Chief Risk Officers (CROs). The Operational Risk Core Report and Information Risk Management Dashboard, providing a group-wide overview of the operational risk profiles, (trends in) operational losses and main risk signals, are standard items on the agenda. Depending on the topic, other expert control functions (e.g., Model Management, Data Quality Management, Finance, etc.) complete the committee.

## The building blocks for managing operational risks

In line with the other risk types, a number of group-wide building blocks are defined to ensure proper management of operational risks:

- Setting and cascading risk appetite: the risk appetite for operational risk is set in line with the overall requirements as defined in our overarching risk management framework;
- Risk identification: identifying operational risks involves following up on legislation, as well as using the Product Approval Process, analysing key risk indicators, risk challenges, deep dives, root cause analysis of losses and other trigger-based risk observations. A structured, process-based repository of Group Key Risks and related mitigating Group Key Controls (GKCs) is in place to set top-down minimum standards for risk and control self-assessments performed by the business side. The current set of GKCs covers the complete process universe of the KBC group and is designed to manage key operational risk types. A review process is in place to keep the repository in line with new or emerging operational risk types. Entities translate these group control objectives into their operational process environment and supplement them with additional, local operational controls, if necessary;
- Risk and control metrics: as operational risk is embedded in all aspects of the organisation, unified group metrics and scales are in place to define and support not only the underpinning of the risk profile of an entity, but also the process and individual operational risk levels. The maturity status of individual control objectives within the processes is also defined on a unified scale. In addition, a group-wide uniform scale is used to express the overall internal control state of each process in each material entity;
- Risk response and follow-up: a uniform approach – strongly based on first-line of defence accountability (business side) and challenged by the second line of defence (risk, compliance, legal, etc.) and assurance by the third line of defence (internal audit) – is in place with risk-based follow-up at both local and group level;
- A standardised, loss data collection process is in place, including root cause analysis and appropriate response;
- Reporting: minimum standards for the operational risk management reporting process are defined. Besides regulatory required reporting, structural reporting to the group risk committees is performed every quarter. The quality of the internal control environment and related risk exposure is reported to KBC's senior management via a management dashboard and to the NBB, the FSMA and ECB via the annual Internal Control Statement;
- Stress testing: an annual stress test is performed to assess the adequacy of pillar 1 operational risk capital.



Group-wide tools are used by the three lines of defence to support the core activities of operational risk management (risk and control self-assessments, control monitoring, risk responses and action plans, reporting on near misses and operational losses, etc.).

The broad spectrum of operational risks is categorised into a number of sub-risk types, in accordance with Basel requirements and industry practice. In 2019, specific attention was paid to the top sub-risk types set out below.

## Focus on top risk areas

The broad spectrum of operational risks is categorised into a number of sub-risk types, in accordance with Basel requirements and industry practice. In 2019, specific attention was paid to the top sub-risk types set out below.

### *Information risk management*

Information risks encompass information security, IT-related risks and business continuity management, including crisis management. Information security risk, especially 'cybercrime-related fraud', is one of the most material risks that financial institutions face these days.

The mission of KBC's Competence Centre for Information Risk Management (IRM) is to protect KBC against threats to data and information, such as loss of integrity, loss of confidentiality and unplanned availability. The competence centre includes an internationally recognised and certified Group Cyber Expertise & Response Team (CERT).

The core activities of information risk management are:

- **Steering:** developing and measuring group-wide information security and IT-related methodology, risk tooling, key controls, standards and facilitating regulatory assignments;
- **Reporting:** driving risk governance via group-wide risk reporting and oversight;
- **Supporting:** strengthening the risk capabilities of our entities by offering on-site coaching, threat intelligence and support;
- **Challenging:** ensuring risks are effectively controlled via group-wide investigations, via ethical hacking exercises, technical Cyber Resilience & Readiness Testing, detailed investigations ('deep dives') and continuous validation;
- **Communicating:** turning the information risk community into an active, strong alliance via training and awareness, events, roundtables and information sharing;
- **Responding:** enabling entities to deal with local cyber crises and handle major incidents, managing group-wide crises, providing group-wide oversight, and performing crisis simulations and other incident drills.

### *Outsourcing risk management*

Increased cooperation with third parties, on the one hand, and strategic nearshoring within the KBC group, on the other, have increased the focus on outsourcing risk. From a supervisory perspective, nearshoring is fully equated to outsourcing.

In order to manage outsourcing risk, KBC has a group-wide standard to ensure the risk is properly managed in all entities, in accordance with EBA Guidelines on Outsourcing. Key control objectives are defined when managing both internal and external outsourcing risk during the full lifecycle. Several initiatives are in place to ensure that the quality of overall governance and management of outsourced activities is guaranteed, that the group-wide outsourcing register is properly managed and that qualitative advice is provided to support business decisions.

### Model risk management

The expanding use of complex models in the financial sector and at KBC is increasing model risk. New types of complex (AI) models are being developed and will increasingly be put to use in most, if not all, business domains.

The model risk management standard is applied across business domains (banking, insurance, asset management) and across the different types of modelling techniques (regression, machine learning, expert-based, etc.). As such, KBC has a model inventory, providing a complete overview of all models used, including an insight into the related risk. For the purpose of labelling model risk, KBC considers intrinsic model uncertainty, materiality, the use and the maturity of governance applying to a model. This provides the basis for defining priorities and establishing domain and country-specific action plans.

## Root causes of Operational Losses

The Loss Data Collection Process is one of the cornerstones of operational risk management and covers all operational risk event types in line with Basel classification.

The reporting process ensures that responsible parties are notified, perform proper root cause analysis and take actions to improve the control environment. Individual major loss events are reported to the CRO. Structural loss reporting to senior accountable management and risk committees, including trends analysis and benchmarking with peers, is in place.

The main root causes of operational losses at KBC, according to gross loss impact over the past three years, are associated with external fraud and issues with execution, delivery and process management (see graph below). Other categories remain limited in gross loss P&L impact, but not necessarily in terms of the number of events.

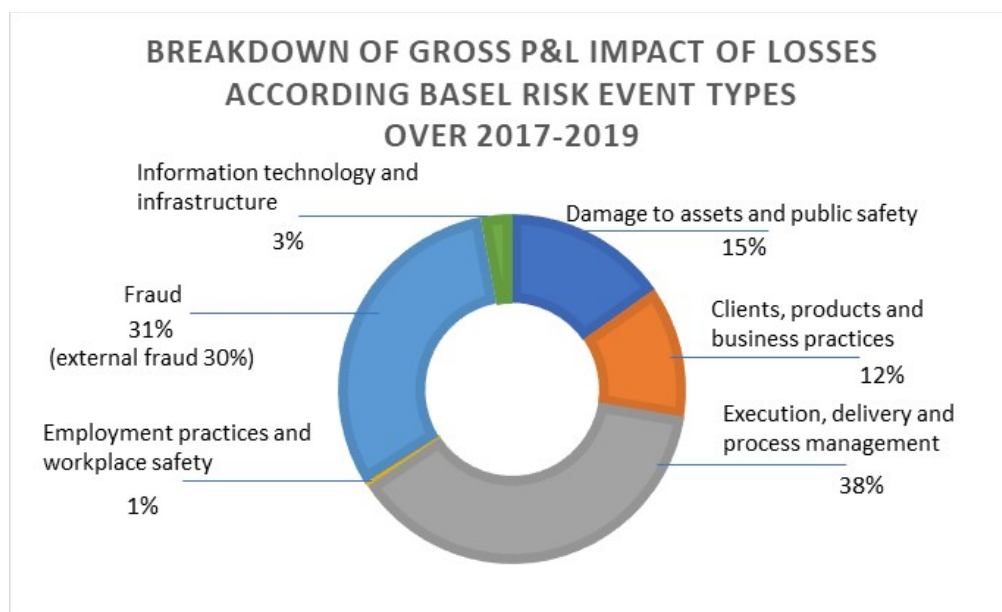


Figure 7 - Breakdown of gross P&L impact of losses according to Basel risk event types over 2017-2019

## Compliance risk

Compliance risk is the risk of losses or sanctions due to failure to comply with laws and regulations presenting an integrity dimension and with internal policies and codes of conduct reflecting the institution's own values, as defined in the Group Compliance Framework. It includes conduct risk, i.e. the current or prospective risk of losses arising from inappropriate supply of financial services, including cases of wilful or negligent misconduct. This covers aspects of both hard law and soft law.

The Compliance function's role is twofold: on the one hand, it provides advice from an independent viewpoint on the interpretation of laws and regulations pertaining to the domains it covers. This preventive role materialised, among others, through Group Compliance Rules that define minimum requirements for the entire group, the provision of procedures and instructions, tailored training courses, daily advice and independent opinions in the Product Approval Process, information on new regulatory developments to the governance bodies and support of group strategy, and the implementation of legal and regulatory requirements by the various businesses concerned.

On the other hand – as the second line of defence – it carries out risk-based monitoring to ensure the adequacy of the internal control system. More specifically, monitoring allows it to verify whether legal and regulatory requirements are being correctly implemented in the compliance domains, in line with the three lines of defence model and as described in the Group Compliance Charter and methodology manual. It also aims to ensure the effectiveness and efficiency of the controls performed by the first line of defence. Moreover, quality controls are performed in the main group entities to assure the Board of Directors that the compliance risk is being properly assessed.

The governance of the Compliance function, as described in the Group Compliance Charter, was revised during 2019 to make it more future-proof and scalable. This was achieved by simplifying processes, fostering group-wide cooperation among the teams, and through automation and artificial intelligence, which are currently being developed to enhance management of the money laundering risk. Resources have been significantly increased group-wide and monitoring strongly reinforced. Coordination of the Group Fraud Management Framework has also been integrated within Group Compliance.

The values defended by the group and the key requirements are set out in detail in the Integrity Policy. They are complemented by a content-based strategy and by backward and forward-looking, qualitative and quantitative key risk indicators to better underpin the risk profile of the organisation and to reflect the ultimate aim of conforming with the letter and spirit of the law.

Like many other financial institutions, the prevention of money laundering and terrorism financing, including embargoes, was a top priority for the Compliance function in 2019. It is an area where, as several press articles referred to, the knowledge of the client (Know Your Customer (KYC)), updating their profiles and monitoring transactions (Know Your Transactions (KYT)) are essential. Efforts are continuously made to adapt the organisation to a constantly changing regulatory environment, particularly with regard to clients who present an increased risk and for whom additional information is required. Recent developments regarding KYC utilities that enable large banks to share harmonised KYC data on companies are promising and could facilitate client onboarding.

KBC will also continue its group-wide programme to fine-tune implementation of the EU's Fourth Anti-Money Laundering Directive and is taking due consideration of the Fifth Directive, while enhancing artificial intelligence modelling to better target unusual transaction patterns.

It goes without saying that the interests of the client come first. Given this position, the control functions ensure that, under the Product Approval Process, the launch of any new products conforms with the many legal and regulatory provisions in place, such as MiFID II, the Insurance Distribution Directive and other local and EU Regulations, as well as being in line with KBC's values.

Data protection aspects have been central in 2019 to maximising conformity with GDPR and highlighting its importance through targeted awareness campaigns, while maintaining the right balance with the technological developments inherent in the digitalisation strategy now and going forward.

## Operational risk and regulatory capital requirements

In line with the current Basel III adequacy rules for banking institutions, KBC uses a standardised approach for the calculation of the regulatory operational risk capital.

KBC's bank activities are classified in line with the Basel business lines: corporate finance, trading & sales, retail banking, commercial banking, payment & settlement, agency services, asset management, and retail brokerage. Within each business line, the gross income is used as a broad indicator for the scale of business operations as well as the operational risk exposure. The capital charge for each business line is calculated by multiplying the gross income by the 'beta' factor assigned to that business line. These beta factors serve as a proxy for the industry-wide relationship between the operational risk loss experience for a given business line and the aggregate level of gross income for that business line. The total capital charge is calculated as the three-year average of the simple summation of the regulatory capital charges across each of the business lines in each year.

Basel Business line	Beta factor
Corporate Finance	18%
Trading & Sales	18%
Retail Banking	12%
Commercial Banking	15%
Payments & Settlements	18%
Agency Services	15%
Assets Management	12%
Retail Brokerage	12%

*Table 85 - Beta factors for Basel business lines, used for the standardised approach regulatory capital Operational risk*

For operational risk (including compliance risk), we use the Standardised approach under Basel III. Operational risk capital at KBC group level totalled 910 million euros at the end of 2019 and 887 million euros at the end of 2018. The increase was accounted for by the buyout of ČMSS (resulting in a higher amount of risk-weighted assets for ČSOB Bank in the Czech Republic) along with higher year-on-year average income at KBC Bank NV and ČSOB Bank in the Czech Republic.

As of 1 January 2022, KBC will apply the applicable revised Basel III single standardised approach for the calculation of the regulatory operational risk capital.

Regulatory capital Operational Risk (in millions of EUR)	2019	2018
Risk-Weighted Assets	11 370	11 084
Capital	910	887

## Reputational risk

Reputational risk is the risk arising from the negative perception on the part of clients, counterparties, shareholders, investors, debt-holders, market analysts, other relevant parties or regulators that can adversely affect a financial institution's ability to maintain existing or establish new business relationships and to have continued access to sources of funding (for instance, through the interbank or securitisation markets).

Reputational risk is mostly a secondary or derivative risk since it is usually connected to and will materialise together with another risk.

The Reputational Risk Management Framework is in line with the overarching KBC Risk Management Framework. The pro-active and re-active management of reputational risk is the responsibility of the business side, supported by many specialist units (including Group Communication and Group Compliance).

## Business & strategic risk

Business risk is the risk arising from changes in external factors (the macroeconomic environment, regulations, client behaviour, competitive landscape, socio-demographic environment, climate, etc.) that impact the demand for and/or profitability of our products and services. Strategic risk is the risk caused by not taking a strategic decision, by taking a strategic decision that does not have the intended effect or by not adequately implementing strategic decisions.

The world is constantly changing. As KBC pursues market opportunities, it must also prepare for potential risks arising from changing client behaviour, the quickly evolving competitive landscape, geopolitical risks, worldwide health threats, as well as from climate change and broader natural capital depletion. The latter are considered significant new game changers not only for banks and insurers, but also their clients. Consequently, emerging business risks are regularly screened and new ones actively scanned and analysed.

Business and strategic risks are assessed as part of the strategic planning process, starting with a structured risk scan that identifies the top financial and non-financial risks. Exposure to the identified business and strategic risks is monitored on an ongoing basis. Besides the risk scan, business and strategic risks are continually monitored by means of risk signals being reported to top management. In addition, these risks are discussed during the aligned planning process and are quantified under different stress test scenarios and long-term earnings assessments.

A number of significant business events that have impacted risk management at KBC over the past year are given below:

## Risk innovation and transformation

The fast-changing competitive environment and shifting client behaviour are sending the financial industry into unknown territory. This uncertainty gives rise to new risks, but brings about new opportunities at the same time for serving our customers.

To understand the risks, the technologies and trends deemed relevant to KBC are continuously assessed. Experiments are carried out to fully comprehend the consequences of a new technology or trend. The risk function adapts and further strengthens KBC's Risk Management Framework and its underlying risk management processes in order to properly and pro-actively assess and mitigate the risks. New services like 'contactless payment with wearables' have gone through this Product Approval Process.

When evaluating risks attached to experiments throughout the group, we identify best practices across the risk function. New trends are also monitored closely and translated into the risk framework, if deemed necessary. For example, the use of advanced data analytics and artificial intelligence is becoming increasingly more widespread and, therefore, has prompted KBC to strengthen its model risk management standards (see 'Model risk management' above). Since we have heavily invested in automating our business processes at KBC, we have integrated a set of management practices on robotic process automation into our existing Risk Management Framework.

Apart from embedding new trends and technologies into our risk processes and frameworks, we also use them to expand our risk toolkit and improve the efficiency of risk management processes. Robotic process automation is used in several risk domains to automate reporting and enhance efficiency, among other things, in operational risk management. It also helps us to automate standard, repetitive administrative tasks, while artificial intelligence is able to deal with more complex problems. We evaluate the use of artificial intelligence to better pro-actively identify and segment risk.

The risk function focuses on staying connected at all times through internal partnerships and by working with partners outside KBC. We have launched a number of projects that have resulted in a fruitful collaboration with fintech companies for Solvency II reporting, cyber risk reporting, regulatory update services and assessing the impact of climate change. We also raise awareness of and build up knowledge and expertise in new technologies. This knowledge is bundled into staff training sessions, such as holistic courses on artificial intelligence and robot process automation.

We continue to invest in knowledge to further reinforce our risk management practices and to ensure our risk professionals have the skills required for the future.

## Brexit

At the end of January 2020, the UK formally left the EU after signing the EU Withdrawal Agreement. At this stage, the UK has a limited time span (the so-called 'implementation period' that ends on 31 December 2020) to negotiate its future relationship with the EU. If trade deals are agreed and ratified with the EU in that period, the UK will be able to start its new relationship with the EU on the basis of those deals as of 2021. Exiting the implementation period with no deals in place would mean the UK having to follow World Trade Organization Rules and imposing tariff rates for goods. For services, regulatory divergence – reflecting an absence of reciprocal recognition of each other's frameworks – would distort free trade.

It is important to mention that a one-off extension of the negotiation period is possible for up to one or two years, provided the UK and the EU mutually agree to it before the end of June 2020.

KBC still expects negotiations to end up in a deal entailing free trade in goods, broad regulatory alignment and the absence of a hard border on the island of Ireland. It is also assumed that the details of that deal and the broader outline of the proposed future relationship between the UK and the EU would ensure that Brexit will not materially derail the expected growth scenario for either the euro area or the UK. Aside from this assumption, KBC is keeping track of all the possible consequences of any harder scenarios that might materialise towards the end of 2020.

KBC Bank London branch: during the transition period in 2020, KBC's UK branch will continue to operate under the EU passport system as an incoming EEA (European Economic Area) firm, meaning that EU regulations continue to apply.

Derivatives clearing business: as reported last year, KBC had taken the contingent decision to become active on an alternative platform for derivatives clearing on the EU continent. The resulting cooperation with EUREX Frankfurt started already in 2018 and became fully operational in 2019.

Should no trade agreements be reached, the domains affected most are comparable with those identified in previous analyses of hard Brexit scenarios.

If no trade agreement or extension period is decided in 2020, the consequences for KBC would mainly affect:

- KBC Bank Ireland: The open nature of the Irish economy and its close links to the UK underpin the consensus view that the impact of moving back to World Trade Organization Rules would be negative. Earlier studies on a hard Brexit scenario have already suggested that real GDP growth in Ireland would contract by 3-7%. This effect would be felt predominantly over a three- to five-year period. However, these negative effects may be offset by several positive ones. For instance, an Economic & Social Research Institute (ESRI) study suggested significant offsetting gains because of the relocation of UK-based institutions to Ireland. Even based on reasonably conservative assumptions, such inflows could boost GDP by up to 3%. Moreover, significant disinflationary impulses can be expected that would assist competitiveness and support household consumer power;
- Exposure to corporations and SMEs: the most affected export sectors are likely to be agriculture and the agri-food and textiles industries, as they would suffer from a further depreciation of Sterling and higher tariff rates;
- Net interest income: the absence of trade deals would slow down economic growth and inflation in the euro area and as such contribute to lower interest rates for a longer period;
- Asset management activities: we expect the fee business to be impacted should there be a significant decline in the UK and European stock markets.

## Interest rate benchmarks

Interest rate benchmarks play a key role in the smooth functioning of the financial markets and are widely used by banks and other market participants. These benchmarks are currently undergoing in-depth reforms. After the scandals surrounding the setting of LIBOR, the UK's Financial Conduct Authority announced that it would no longer oblige banks to contribute to the LIBOR-setting panel from the end of 2020.

In the European Union, the Benchmark Regulation (EU 2016/1011 (BMR), which has been delayed and is now scheduled to come into effect by the end of 2021) sets revised guidelines and regulations on the eligibility of a benchmark calculation methodology to move the focus away from 'professional judgement' to a more transaction-based methodology. The European Security and Markets Association (ESMA) was given the role of overseeing this transition.

The ECB has launched two initiatives in this field: the development of a daily euro unsecured overnight interest rate (ESTER) and the set-up of an industry working group, together with other European institutions, tasked with identifying alternative risk-free rates for widespread adoption.

In this context, KBC has set up a working group to quantify the risks associated with these changes and to follow up any new developments. KBC has prepared implementation plans for ESTER in its different business segments and will start activating them in the course of 2020.

## Coronavirus

The recent emergence of COVID-19 (more commonly known as the 'coronavirus') has required additional attention. At the time this report was being prepared, KBC was monitoring the situation on a daily basis. Business continuity plans and epidemic contingency plans have been activated and are in different phases depending on the KBC group entity concerned. Besides monitoring increased operational risk, we are keeping a very close eye on the related macroeconomic impact, including the impact on KBC's home markets from decreasing GDP growth in China at a time when its economy is already in a fragile state. The financial markets also appear to be highly sensitive to the risks relating to the coronavirus, with stock markets, interest rates and oil prices all falling. A broad range of companies may be directly affected due, for instance, to their reliance on imports or exports, their exposure to vulnerable sectors and – for Central European borrowers – their link with the German economy, leading to a potential worsening of their credit profile. The coronavirus might also affect KBC's insurance business, as pandemics/epidemics are usually covered by our insurance policies, though reinsurance cover is available for mortality risk at KBC Insurance NV.



## Climate-related risks

The risk associated with the transition to a low-carbon economy and the risk from climate-related physical events that impact our business.

The KBC Risk Management Framework defines the group-wide standards for risk management. Since this framework covers all risks that KBC is exposed to, climate-related risks are being gradually embedded in existing risk management processes.

### Governance

The KBC Risk Management Framework is supported by solid risk governance:

- The management of climate-related risks is fully embedded in our existing Risk Management Governance;
- Risk is actively addressed by the core team of the Sustainable Finance Programme, which focuses on integrating climate-related matters throughout the group;
- The senior general managers of the Group (Credit) Risk Department are members of the Sustainable Finance Programme Steering Committee and one of them also sits on the Internal Sustainability Board.

### Risk identification and classification

We continuously scan the internal and external environment for new and emerging risks we are exposed to in the short term (1-to-3-year horizon), in the medium term (3-to-20-year horizon) and in the long term (20-to-30-year horizon). This group-wide process involves all necessary stakeholders, including entities from the business side, corporate sustainability and asset management. To ensure pro-active climate-related risk identification in an integrated environment, we:

- organise internal communication and training for (risk) staff and management;
- have set up a Sustainable Finance Legal Working Group to follow up new and changing regulations;
- take into account sustainability and climate-related policies when deciding on new products or services;
- have identified and defined climate risk in our risk taxonomy;
- regularly report on climate-related risk signals to senior management.

We also identified and defined climate risk in our risk taxonomy, which in turn will be the trigger to more explicitly embed climate change in the other risk areas, such as credit risk, market risk and technical insurance risk. Following the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), we differentiate between:

- transition risks: risks arising from disruptions and shifts associated with the transition to a low-carbon economy which include policy risks (e.g., imposition of a carbon tax), legal risks (e.g., climate-related litigation) or technology risks (e.g., old technology replaced by cleaner technology), market demand/supply shifts (e.g., changing consumer behaviour) and reputational risks (e.g., reduced client satisfaction of companies with a reputation of harming the climate). These risks can affect the creditworthiness of our clients and the stability of our portfolios on a medium-term horizon;

- physical risks: risks related to potential financial implications from physical phenomena associated with both climate trends (chronic) such as changing weather patterns, sea level rise, temperature changes, chronic heat waves, etc. and extreme weather events (acute) including cyclones, floods, fires, heatwaves or droughts which disrupt operations, supply value chains or damage property. These risks can impact KBC's insured losses and may also impact the creditworthiness of our clients, as well as the value of our assets or collateral on the medium to long term.

Climate change was identified as a top risk in the past and remains one of the top risks for KBC going forward. Its importance is increasing, triggered, among others, by the increased sense of urgency regarding the transition to a low-carbon economy, given the rapidly evolving expectations from various stakeholders and the uncertain impact on the overall economy. The identified are used as input for several other risk management exercises and tools, such as risk appetite setting, stress testing, the aligned planning cycle, etc.

## Cascading and setting risk appetite

Our risk appetite objectives support the group in defining and realising its strategic sustainability goals of, inter alia, maintaining a strong corporate culture that encourages responsible environmental and social behaviour, achieving long-term sustainable growth and ensuring stable earnings. To be less vulnerable to changes in the external environment – including climate change – we seek diversity and flexibility in our business mix, client segments, distribution channels and geographies, where we refrain from focusing on short-term gains at the expense of long-term stability.

These high-level risk appetite objectives are further specified for a number of risk types in line with our climate-related policies and will gradually improve based on new insights (see 'Risk measurement'):

- As regards reputational risks, we have a very strict acceptance policy in place, which addresses environmental, social, and governance-related matters. This includes the KBC-Blacklist of companies that do not comply with our ethical standards and are, therefore, excluded from all our activities, including the non-SRI funds of KBC Asset Management. A group-wide zero tolerance policy is in place for 'new business with a company on the KBC blacklist'. This policy is fully embedded in the organisation as part of the operational risk management framework;
- In addition to the strategic limits and targets for limiting the environmental impact of our core lending, insurance and investment activities we identify controversial activities in our standards for sustainable and responsible lending and insurance. These relate to economic activities we are not willing to finance (such as coal-related activities) or only under strict conditions (such as gas-fired electricity generation, biomass technologies, production of palm oil, etc.). These activities are managed through sound lending and insurance processes, acceptance policies and product characteristics, and are actively screened by the business side, with quality controls performed by the second and third lines of defence. They clearly define the playing field for credit and insurance risks;
- Where we suspect a breach of the policies, we take action to mitigate its impact. For example, an exit strategy might have to be defined after a loan has been provided and the borrower's business subsequently changes. The Corporate Sustainability Department also provides advice when identifying such activities. If the business side wants to overrule this advice, a final decision will be taken by the Extended Credit Committee or Group Insurance Committee, respectively. In exceptional cases, these committees might escalate the matter to the Executive Committee.

## Risk measurement

We are working together with external parties on a series of tools and methodologies to strengthen our ability to identify and measure climate-related risks (see 'Focus on climate' in the 2019 Annual Report). These tools will provide further insights into the impact of climate change on our business model, as well as the impact of our activities on the environment. Integrating these tools and methodologies will enable us to gradually improve underwriting policies, and will support us in engaging with our clients.

Please find below an overview of the most climate-sensitive industrial sectors within our corporate loan portfolio:

Most climate-sensitive corporate industrial sectors*, outstanding loans - KBC Group (in millions of EUR)	2019
<b>Total outstanding loans KBC Group</b>	<b>175 431</b>
<b>Total outstanding loans most climate-sensitive corporate industrial sectors</b>	<b>37 828</b>
Real Estate	11 231
Building & Construction	6 819
Agriculture, farming & fishing	4 717
Automotive	4 625
Food producers	2 968
Electricity	2 791
Metal	2 466
Chemicals	2 211

\* Only sectors representing more than 5% of the identified climate-sensitive corporate industrial loans by the end of 2019 are reported separately. Although climate change has a potential impact on all industries and sectors, the selection of climate-sensitive sectors was based on, among others, the TCFD recommendations (2017), in anticipation of more standardised frameworks and analysis (see the Sustainability Report for preliminary results).

*Table 86 - Most climate-sensitive corporate industrial sectors, outstanding loans - KBC Group*

To better understand the potential financial impact of transition scenarios on our activities and our vulnerability towards carbon-intensive sectors, we started following three methodological tracks, covering a number of our key exposures:

- Together with 17 other banks, we are testing the Paris Agreement Capital Transition Assessment tool (PACTA) to measure the alignment of our corporate industrial loan portfolio with the Paris Agreement climate goals. It measures the transition risks of climate change by measuring credit exposures to transition technologies in some of the most carbon-intensive sectors, such as the steel, automotive, shipping, aviation, power, oil & gas, coal and cement sectors. The first results and lessons learned can be found in the 2019 Sustainability Report;
- In cooperation with the United Nations Environmental Program Finance Initiative (UNEP FI), we are in the process of piloting analytical tools and indicators to assess credit risks in our corporate loan portfolio that are associated with the transition to a low-carbon economy. We are getting acquainted with the methodology, initially developed by UNEP FI and Oliver Wyman in 2018 and being piloted by 15 banks in a first phase. The methodology translates the impact of forward-looking climate scenarios into changes in traditional credit risk indicators, such as expected loss, loan-to-value or probability of default. We are also actively contributing to further improving the methodology during the second phase of the UNEP FI Banking Pilot, which started in the summer of 2019 and covers the metals sector;
- We joined the Platform Carbon Accounting Financials (PCAF) initiative to identify the greenhouse gas emissions of our loan and investment portfolios, a useful tool to measure and track the environmental impact of our activities. In 2019, we started the analysis for residential mortgages, car leasing, motor vehicle loans and commercial real estate in Belgium.

Besides the transitional risks, we are also in the process of assessing physical risks as part of the second phase of UNEP FI. We started to analyse our Flemish residential mortgage loan portfolio using the methodology developed by

UNEP FI and Acclimatise in 2018. This will be the first step in better understanding the possible impact of climate-related, acute or chronic flood events on our mortgage loan-to-value ratios.

## Risk analysis, monitoring and reporting

Indicators for climate-related risks and opportunities are integrated into the KBC Sustainability Dashboard, which allow us to monitor progress in the implementation of our sustainability strategy and to make adjustments when necessary. Climate-related risks will be further integrated into our internal risk reports, ICAAP/ORSA and external reports. Stress testing will also be used as a key tool to gain insights into climate-related vulnerabilities.

The impact of more extreme weather conditions has already been incorporated into the insurance activities, as we use a number of internal and external measures, along with stress tests, to analyse the potential impact of (acute) natural catastrophe events on our non-life (property) portfolio. For the modelling of natural catastrophe events, external broker and vendor models are used in all KBC insurance entities. KBC actively engages and enforces a dialogue on the consideration of climate change in the scenario analysis of these providers.

Forward-looking trends, such as changes in storm and precipitation patterns and changes in the frequency of floods are monitored as part of the Insurance Risk Management Framework and related processes (see 'Technical insurance risks'). Physical risks in other regions around the world are also closely monitored as they can have an impact on the global reinsurance market on which KBC relies. Climate change does not represent a significant technical insurance risk for KBC in the short to medium term, due mainly to the well-diversified nature of KBC Insurance's life and non-life activities, the focus on our core markets in Belgium and Central Europe, and the annual renewal of policies and related reinsurance contracts.

A number of initiatives were started to improve our understanding of how to measure ESG and climate-related risks. The insights gained will then be used to explore how we can further integrate these risks into our credit assessment process and modelling (including expected credit losses) and to adapt our policies, where necessary. Moreover, management has the ability to overrule the expected credit losses and to capture events that are not part of the financial assessment, such as the growing insights into ESG and climate-related risks. To date, this approach has yet to be applied.

# Market Risk Management (non-trading)

The process of managing our structural exposure to market risks (including interest rate risk, equity risk, real estate risk, foreign exchange risk and inflation risk) is also known as Asset/Liability Management (ALM).

'Structural exposure' encompasses all exposure inherent in our commercial activity or in our long-term positions (banking and insurance). Trading activities are consequently not included. Structural exposure can also be described as a combination of:

- mismatches in the banking activities linked to the branch network's acquisition of working funds and the use of those funds (via lending, among other things);
- mismatches in the insurance activities between liabilities in the non-life and life businesses and the cover for these liabilities present in the investment portfolios held for this purpose;
- the risks associated with holding an investment portfolio for the purpose of reinvesting shareholders' equity (the so-called strategic position);
- the structural currency exposure stemming from the activities abroad (investments in foreign currency, results posted at branches or subsidiaries abroad, foreign exchange risk linked to the currency mismatch between the insurer's liabilities and its investments).

## Strategy and processes

Management of the ALM risk strategy at KBC is the responsibility of the Group Executive Committee, assisted by the Group ALCO, which has representatives from both the business side and the risk function. The Group Executive Committee decides on the non-trading market risk framework, which sets out specific risk guidance.

Managing the ALM risk on a daily basis starts with risk awareness at Group Treasury and the local treasury functions. The treasury departments measure and manage interest rate risk on a playing field defined by the risk appetite. They take into account measurement of prepayment and other option risks in KBC's banking book and manage a balanced investment portfolio. KBC's ALM limits are approved at two levels. Major limits for interest rate risk, equity risk, real estate risk and foreign exchange risk for the consolidated entities are approved by the Board of Directors. Local limits for interest rate risk, equity risk, real estate risk and foreign exchange risk are approved for each entity by the Executive Committee. Together this forms the playing field for KBC's solid first line of defence for ALM risk.

Group Risk and the local risk departments, which constitute the second line of defence, measure ALM risks and flag current and future risk positions. A common rulebook, which supplements the framework for technical aspects, and a shared group measurement infrastructure ensure that these risks are measured consistently throughout the group.

The main building blocks of KBC's ALM Risk Management Framework are:

- A broad range of risk measurement methods such as Basis-Point-Value (BPV), gap analysis and economic sensitivities;
- Net interest income simulations performed under a variety of market scenarios. Simulations over a multi-year Period are used in budgeting and risk processes;

- Capital sensitivities arising from banking book positions that impact available regulatory capital (e.g., fair value through other comprehensive income);
- Stress testing and sensitivity analysis.

## Scope of non-trading market risk disclosures

The ALM framework is applicable to all material KBC group entities that are subject to non-trading market risks. In practice, this means all entities of the KBC group with the exception of entities that only conduct trading activities. In banking entities with both trading and other activities, the balance sheet is split into a trading book and a banking book, with ALM only dealing with the risks incurred in the banking book.

Interest rate risk, credit spread risk and equity risk account for the lion's share of the total risk and will thus be discussed in more detail. However, real estate risk, inflation risk and foreign exchange risk are also briefly addressed below.

## Interest rate risk

### Interest rate risk for the banking activities

The main technique used to measure interest rate risks is the 10 BPV method, which measures the extent to which the value of the portfolio would change if interest rates were to go up by ten basis points across the entire swap curve (negative figures indicate a decrease in the value of the portfolio). We also use other techniques such as gap analysis, the duration approach, scenario analysis and stress testing (both from a regulatory capital perspective and from a net income perspective).

Impact of a parallel 10-basis-point increase in the swap <sup>2</sup> curve for the KBC group Impact on value <sup>1</sup> (in millions of EUR)	Impact on value <sup>1</sup>	
	2019	2020
Banking	-96	-65
Insurance	23	16
Total	-73	-49

1. Full market value, regardless of accounting classification or impairment rules.  
2. Based on a risk-free curve (swap curve).

*Table 87 - Impact of a parallel 10-basis-point increase in the swap curve for the KBC group Impact on value*

We manage the ALM interest rate positions of the banking entities via a system of market-oriented internal pricing for products with a fixed maturity date, and via a replicating portfolio technique for products without a fixed maturity date (e.g., current and savings accounts).

The bank takes interest rate positions mainly through government bonds, with a view to acquiring interest income, both in a bond portfolio used for reinvesting equity and in a bond portfolio financed with short-term funds. The table below shows the bank's exposure to interest rate risk in terms of 10 BPV.

Swap BPV (10 basis points) of the ALM book, banking activities*		
(in millions of EUR)	2019	2018
Average for 1Q	-84	-76
Average for 2Q	-104	-64
Average for 3Q	-94	-61
Average for 4Q	-96	-65
As at 31 December	-96	-65
Maximum in year	-104	-76
Minimum in year	-84	-61

\* Unaudited figures, except for those 'As at 31 December'

Table 88 - Swap BPV (10 basis points) of the ALM book, banking activities

In line with European Banking Authority (EBA) guidelines, we conduct an outlier stress test at regular intervals by applying six different scenarios to the banking books (material currencies). The worst-case scenario is set off against total common equity tier-1 (CET1) capital. For the banking book at KBC group level, this risk came to 7.91% of CET1 capital at year-end 2019. This is well below the 15% threshold, which is monitored by the European Central Bank (ECB).

The following table shows the interest sensitivity gap of the ALM banking book. In order to determine the sensitivity gap, we break down the carrying value of assets (positive amount) and liabilities (negative amount) according to either the contractual repricing date or the maturity date, whichever is earlier, in order to obtain the length of time for which interest rates are fixed. We include derivative financial instruments, mainly to reduce exposure to interest rate movements, on the basis of their notional amount and repricing date.

Interest sensitivity gap of the ALM book (including derivatives), banking activities (in millions of EUR)								
	≤ 1 month	1–3 months	3–12 months	1–5 years	5–10 years	> 10 years	Non-interest bearing	Total
31-12-2019	2 961	-1 982	945	6 471	6 863	2 419	-17 677	0
31-12-2018	7 337	-5 922	763	3 558	5 561	1 512	-12 810	0

Table 89 - Interest sensitivity gap of the ALM book (including derivatives), banking activities

The interest sensitivity gap shows our overall position in interest rate risk. Generally, assets reprice over a longer term than liabilities, which means that KBC's net interest income benefits from a normal yield curve. The economic value of the KBC group is sensitive primarily to movements at the long-term end of the yield curve.

An analysis of net interest income is performed by measuring the impact of a one percent upward shock to interest rates over a one-year period, assuming a constant balance sheet. For the banking activities, the analysis shows that net interest income would remain under pressure over the next year due to the low rate environment.

## Interest rate risk for the insurance activities

Where the group's insurance activities are concerned, the fixed-income investments for the non-life reserves are invested with the aim of matching the projected payout patterns for claims, based on extensive actuarial analysis.

The non-unit-linked life activities (class 21) combine a guaranteed interest rate with a discretionary participation feature (DPF) fixed by the insurer. The main risks to which the insurer is exposed as a result of such activities are a low-interest-

rate risk (the risk that return on investments will drop below the guaranteed level) and a risk that the investment return will not be sufficient to give clients a competitive profit-sharing rate. The risk of low interest rates is managed via a cashflow-matching policy, which is applied to that portion of the life insurance portfolios covered by fixed-income securities. Unit-linked life insurance investments (class 23) are not dealt with here, since this activity does not entail any market risk for KBC.

In the table below, we have summarised the exposure to interest rate risk in our life insurance activities. The life insurance assets and liabilities relating to business offering guaranteed rates are grouped according to the expected timing of cashflows.

Expected cashflows (not discounted), life insurance activities						
(in millions of EUR)	0–5 years	5–10 years	10–15 years	15–20 years	> 20 years	Total
<b>31-12-2019</b>						
Fixed-income assets backing liabilities, guaranteed component	7 073	3 797	1 923	1 875	880	15 548
Liabilities, guaranteed component	5 599	3 602	2 358	1 789	2 978	16 326
Difference in expected cashflows	1 474	195	-435	86	-2 099	-778
Mean duration of assets						7.29 years
Mean duration of liabilities						10.03 years
<b>31-12-2018</b>						
Fixed-income assets backing liabilities, guaranteed component	6 978	4 388	1 679	1 597	799	15 442
Liabilities, guaranteed component	5 513	3 923	2 338	2 008	2 606	16 389
Difference in expected cashflows	1 465	465	-659	-411	-1 807	-947
Mean duration of assets						6.55 years
Mean duration of liabilities						9.20 years

Table 90 - Expected cashflows (not discounted), life insurance activities

As mentioned above, the main interest rate risk for the insurer is a downside one. We adopt a liability-driven ALM approach focused on mitigating the interest rate risk in accordance with KBC's risk appetite. For the remaining interest rate risk, we adhere to a policy that takes into account the possible negative consequences of a sustained decline in interest rates, and have built up adequate supplementary reserves.

Breakdown of the reserves for non-unit-linked life insurance by guaranteed interest rate, insurance activities	31-12-2019	31-12-2018
5.00% and higher	3%	3%
More than 4.25% up to and including 4.99%	8%	9%
More than 3.50% up to and including 4.25%	5%	5%
More than 3.00% up to and including 3.50%	10%	10%
More than 2.50% up to and including 3.00%	4%	6%
2.50% and lower	69%	65%
0.00%	2%	2%
Total	100%	100%

Table 91 - Breakdown of the reserves for non-unit-linked life insurance by guaranteed interest rate, insurance activities



## Interest rate risk for the KBC group

The figures below show the impact on the KBC group of a 10-basis-point parallel upward shift of swap curves, broken down by currency.

Interest Rate Risk – swap BPV in thousands of EUR 31-12-2019									
	Overall	EUR	CHF	USD	GBP	CZK	HUF	PLN	Other
Banking activities	-96 352	-85 340	-52	-790	-584	-5 134	-8 399	15	3 931
Insurance activities	23 122	23 922	-10	6	0	400	-638	0	-557
Total*	-73 235	-61 422	-63	-785	-584	-4 735	-9 037	15	3 374

\* KBC Asset Management is only included in the total exposure, not in the banking activities.

Table 92 - Interest Rate Risk – swap BPV in thousands of EUR 31-12-2019

Interest Rate Risk – swap BPV in thousands of EUR 31-12-2018									
	Overall	EUR	CHF	USD	GBP	CZK	HUF	PLN	Other
Banking activities	-65 418	-52 867	4	-1 583	-340	-7 352	-6 617	-1	3 339
Insurance activities	16 073	16 489	-7	3	0	222	-533	0	-101
Total*	-49 351	-36 393	-2	-1 580	-340	-7 121	-7 150	-1	3 237

\* KBC Asset Management is only included in the total exposure, not in the banking activities.

Table 93 - Interest Rate Risk – swap BPV in thousands of EUR 31-12-2018

## Credit spread risk

We manage the credit spread risk for, inter alia, the sovereign portfolio by monitoring the extent to which the value of the sovereign bonds would change if credit spreads were to go up by 100 basis points across the entire curve. This economic sensitivity is illustrated in the table below, together with a breakdown per country.

Exposure to sovereign bonds at year-end 2019, carrying value <sup>1</sup> (in millions of EUR)						Economic impact of +100 basis points <sup>3</sup>
Total (by portfolio)	At amortised cost	At fair value through other comprehensive income (FVOCI)	Held for trading	Total	For comparison purposes: total at year-end 2018	
<b>KBC core countries</b>						
Belgium	10 852	3 794	344	14 991	15 336	-821
Czech Republic	5 492	1 071	481	7 044	6 534	-375
Hungary	2 495	371	60	2 927	2 479	-157
Slovakia	2 468	386	0	2 854	2 909	-172
Bulgaria	599	666	17	1 282	1 137	-80
Ireland	1 302	234	0	1 536	1 247	-89
<b>Other countries</b>						
France	4 282	2 082	24	6 388	6 068	-449
Spain	1 828	682	0	2 510	2 646	-133
Italy	778	1 124	0	1 902	1 974	-84
Poland	1 278	414	9	1 701	1 670	-66
US	1 016	0	0	1 016	1 018	-42

Germany	694	113	3	810	788	-42
Austria	439	235	0	674	699	-41
Rest <sup>2</sup>	3 501	1 199	210	4 909	3 786	-149
Total carrying value	37 024	12 370	1 149	50 542	48 292	
Total nominal value	35 271	10 826	1 118	47 216	45 516	

1. The table excludes exposure to supranational entities of selected countries. No material impairment on the government bonds in portfolio.

2. Sum of countries whose individual exposure is less than 0.5 billion euros at year-end 2019.

3. Theoretical economic impact in fair value terms of a parallel 100-basis-point upward shift in the spread over the entire maturity structure. Only a portion of this impact is reflected in profit or loss and/or equity. Figures relate to non-trading positions in sovereign bonds for the banking and insurance businesses (impact on trading book exposure was quite limited and amounted to -15 million euros at year-end 2019).

*Table 94 - Exposure to sovereign bonds at year-end 2019, carrying value*

Revaluation reserve at fair value through other comprehensive income (FVOCI) at year-end 2019:

- The carrying value of the total government bond portfolio measured at FVOCI incorporated a revaluation reserve of 1.1 billion euros, before tax (424 million euros for Belgium, 207 million euros for France, 91 million euros for Italy, 55 million euros for Bulgaria and 358 million euros for the other countries combined).

At year-end 2019, Belgian sovereign bonds accounted for 30% of our total government bond portfolio, reflecting the importance to KBC of Belgium, the group's primary core market.

Apart from interest rate risk, the main risk to our holdings of Belgian sovereign bonds is a widening of the credit spread. To assess the potential impact of a 100-basis-point upward shift in the spread (by year-end 2019), we apply two approaches:

- The theoretical full economic impact approach, which assumes a potential sale of the entire portfolio at market prices. The impact of a 100-basis-point shift would then result in a change in value of -821 million euros (see previous table);
- The IFRS approach, whose impact on IFRS profit or loss is marginal since the lion's share of the portfolio of Belgian sovereign bonds is classified as 'At amortised cost' implying that sales prior to maturity are unlikely (72%; impact only upon realisation). The remaining part is classified as 'FVOCI' (25%; no impact on profit or loss); the impact of a 100-basis-point increase on IFRS unrealised gains is -173 million euros (after tax) for FVOCI assets.

In addition to the sovereign portfolio, the KBC group holds a non-sovereign bond portfolio (banks, corporations, supranational bodies). The sensitivity of the value of this banking book portfolio to a 100-basis-point change in the credit spread is shown in the following table.

Exposure to non-sovereign bonds at year-end, by rating: economic impact of +100 basis points (in millions of EUR)	31-12-2019	31-12-2018
Bonds rated AAA	-198	-146
Bonds rated AA+, AA, AA-	-137	-141
Bonds rated A+, A, A-	-112	-110
Bonds rated BBB+, BBB, BBB-	-64	-52
Non-investment grade and non-rated bonds	-36	-25
Total carrying value (excluding trading portfolio)	12 452	11 989

*Table 95 - Exposure to non-sovereign bonds at year-end, by rating: economic impact of +100 basis points*

## Equity risk

KBC holds equity portfolios, for several purposes. The largest part of the equity portfolio is held as an economic hedge for long-term insurance liabilities, in the Life and non-Life businesses, that can hardly be matched by bond investments. A limited tactical portfolio (55 million euros) aims to contribute to the financial objectives through dividend pay-outs and capital gains. Non-listed equities in the Insurance business (84 million euros) as well as all Bank equities are of a strategic nature and participate in the KBC Group business model. There is no material private equity exposure.

More information on non-trading equity exposure is provided in the table below.

Equity portfolio of the KBC group (breakdown by sector, in %)	Banking activities		Insurance activities		Group	
	31-12-2019	31-12-2018	31-12-2019	31-12-2018	31-12-2019	31-12-2018
Financials	58%	46%	23%	24%	28%	27%
Consumer non-cyclical	0%	1%	9%	10%	8%	9%
Communication	0%	0%	3%	3%	2%	2%
Energy	0%	0%	4%	6%	3%	5%
Industrials	26%	36%	43%	38%	41%	38%
Utilities	0%	0%	3%	2%	2%	2%
Consumer cyclical	4%	7%	11%	12%	10%	11%
Materials	0%	0%	4%	5%	4%	4%
Other and not specified	11%	10%	0%	0%	2%	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
In billions of EUR	0.26	0.26	1.45	1.33	1.70*	1.59
of which unlisted	0.22	0.21	0.08	0.08**	0.31	0.29

\* The main reason for the difference between the 1.7 billion euros in this table and the 2.52 billion euros for 'Equity instruments' in Note 4.1 of the 'Consolidated financial statements' section in the 2019 KBC Group Annual Report is that shares in the trading book (0.83 billion euros) are excluded above, but included in the table in Note 4.1.

\*\* The unlisted amount in the insurance business for 2018 has been restated from 0.01 billion to 0.08 billion, and at group level, from 0.22 billion to 0.29 billion euros

Table 96 - Equity portfolio of the KBC group (breakdown by sector, in %)

Impact of a 25% drop in equity prices (in millions of EUR)	2019	Impact on value 2018
Banking activities	-64	-65
Insurance activities	-362	-332
<b>Total</b>	<b>-426</b>	<b>-396</b>

Table 97 - Impact of a 25% drop in equity prices

Non-trading equity exposure (in millions of EUR)	Net realised gains (in income statement)		Net unrealised gains on year-end exposure (in equity)	
	31-12-2019	31-12-2018	31-12-2019	31-12-2018
Banking activities	-	-	27	16
Insurance activities	117	110	370	173
<b>Total</b>	<b>117</b>	<b>110</b>	<b>396</b>	<b>189</b>

Table 98 - Non-trading equity exposure

## Real estate risk

The groups' real estate businesses hold a limited real estate investment portfolio. KBC Insurance also holds a diversified real estate portfolio, which is held as an investment for non-life reserves and long-term life activities. The real estate exposure is viewed as a long-term hedge against inflation risks and as a way of optimising the risk/return profile of these portfolios. The table provides an overview of the sensitivity of economic value to fluctuations in the property markets.

Impact of a 25% drop in equity prices (in millions of EUR)	2019	Impact on value 2018
Bank portfolios	-92	-94
Insurance portfolios	-98	-81
Total	-190	-175

Table 99 - Impact of a 25% drop in equity prices

## Inflation risk

Inflation – as an econometric parameter – indirectly affects the life of companies in many respects, as do other parameters (for instance, economic growth or the rate of unemployment). It is not easily quantifiable as a market risk concept. However, certain financial products or instruments have a direct link with inflation and their value is directly impacted by a change in market expectations. At KBC, it relates specifically to workmen's compensation insurance, where particularly in the case of permanent or long-term disabilities, an annuity benefit is paid to the insured person (with the annuity being linked to inflation by law). KBC Insurance partly mitigates the risks by investing in inflation-linked bonds so that any increase in liabilities arising from mounting inflation is offset by an increase in the value of the bonds. However, these liabilities are long-dated and significantly exceed the investment horizon of such index-linked bonds. Therefore, KBC Insurance complements its inflation hedging programme by investing in real estate and shares, as these assets are traditionally correlated with inflation and do not have a maturity date.

In 2019, the undiscounted value of the inflation-sensitive cashflows was estimated at 561 million euros, against which a 369-million-euro portfolio of indexed bonds was held. In the years ahead, investments in inflation-linked bonds will be increased further. The banking activities are not exposed to a significant inflation risk.

## Foreign exchange risk

We pursue a prudent policy as regards our structural currency exposure. Material foreign exchange exposures in the ALM books of banking entities with a trading book are transferred via internal deals to the trading book, where they are managed within the allocated trading limits. The foreign exchange exposure of banking entities without a trading book and of insurance and other entities has to be hedged, if material. However, non-euro denominated equity holdings in the investment portfolio are not required to be hedged, as foreign exchange volatility is considered part of the investment return.

In 2019, KBC changed its strategy towards foreign exchange exposures stemming from the value of strategic participations held in foreign currencies. In the past, such participations were fully hedged, so that shareholder value was immune to foreign exchange volatility. As a consequence, the common equity ratio (expressing the relationship between capital and risk-weighted assets) was sensitive to this type of volatility. In 2019, KBC decided to focus on stabilising the common equity ratio against foreign exchange fluctuations, which has improved KBC's capacity to cushion external

shocks and is beneficial to all stakeholders. This implied a reduction in hedging participations. In conformity with Article 322(2) of the Capital Requirement Regulation, KBC requested and obtained a waiver for the unhedged part of the banking participations. The waiver amounts are reviewed every three months and excluded from the exposure for calculating risk-weighted assets. To ensure consistency between banking and insurance entities, strategic insurance participations are no longer hedged either, as they do not affect the common equity ratio under the Danish compromise.

Impact of a 10% decrease in currency value* (in millions of EUR)	Impact on value Banking		Impact on value Insurance	
	31-12-2019	31-12-2018	31-12-2019	31-12-2018
CZK	-200.41	0.67	-17.17	0.1
HUF	-77.79	0	-4.55	0
BGN	-34.68	0	-8.76	0.01
RON	-2.22	-2.33	0	0
USD	-1.61	0.64	-32.74	-29.66
CHF	0.01	0	-8.1	-7.72
GBP	0.01	0.03	-16.22	-16.16
SEK	0.02	0	-1.67	-2.46
DKK	0.27	0	-1.65	-1.18

\* Exposure for currencies where the impact exceeds 1 million euros in Banking or Insurance

Table 100 - Impact of a 10% decrease in currency value

## Capital sensitivity to market movements

The available capital is impacted when the market is stressed. Stress can be triggered by a number of market parameters, including by swap rates or bond spreads that increase or by equity prices that fall. At KBC, we use this capital sensitivity as a common denominator to measure the vulnerability of the banking book to different market risk shocks.

Common equity tier-1 (CET1) capital is sensitive to a parallel increase in bond spreads. This sensitivity is caused by investments in sovereign and corporate bonds whose spread component has not been hedged. The loss in available capital in the event of a fall in equity prices is caused primarily by positions in pension funds that would be hit by such a shock.

CET1 sensitivity to main market drivers (under Danish compromise), KBC group (as % of CET1) IFRS impact caused by	31-12-2019	31-12-2018
+100-basis-point parallel shift in interest rates	0.1%	-0.0%
+100-basis-point parallel shift in spread	-0.2%	-0.2%
-25% in equity prices	-0.3%	-0.2%
Joint scenario	-0.4%	-0.4%

Table 101 - CET1 sensitivity to main market drivers (under Danish compromise), KBC group (as % of CET1) IFRS impact caused by

## Hedge accounting

Assets and liabilities management uses derivatives to mitigate interest rate and foreign exchange risks. The aim of hedge accounting is to reduce the volatility in P&L resulting from the use of these derivatives.

KBC decided not to apply hedge accounting to credit and equity risks. When the necessary criteria are met, it is applied to remove the accounting mismatch between the hedging instrument and the hedged item. For more information about hedge accounting, please see 'Notes on the accounting policies' in the 'Consolidated financial statements' section of the 2019 Annual Report of KBC Group NV.

### Risk categories applying to hedge accounting – Interest rates

Hedging derivatives are used to mitigate an interest rate risk that arises from a difference in the interest rate profile of assets and their funding liabilities. The hedge accounting status of a hedge can be associated with either the asset or the liability item.

*Interest rate derivatives can be designated as:*

- hedges of the fair value of recognised assets or liabilities. Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in profit or loss, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The gain or loss relating to the ineffective portion is also recognised in profit or loss;
- hedges of the cashflow of recognised assets and liabilities which are either certain or highly probable forecasted transactions. The effective portion of changes in the fair value of derivatives that are designated and qualify as cashflow hedges is recognised in the cashflow hedge reserve within equity. The gain or loss relating to the ineffective portion is recognised directly in profit or loss.

KBC uses macro hedge accounting strategies for homogeneous portfolios of smaller items, where the frequency of occurrence or the relatively small size of the average operation renders the one-to-one relationship sub-optimal. This is the case for, inter alia, mortgages, loans to SMEs or customer deposits. Macro hedge strategies may be dynamic and undergo frequent changes based on balancing the portfolio ('open portfolio hedge'), among other things.

The micro hedge designation is used when large individual assets or liabilities are hedged. Typical assets are large corporate loans and bond acquisitions for which the credit spread profile is relevant. Liabilities can include KBC's own issues or specific long-term facilities offered by a central bank. Micro hedges are either fair-value or cashflow based.

*Foreign exchange*

KBC has strategic investments denominated in non-euro currencies. The net asset value of significant participations is partly funded in the local currency by deposits and foreign exchange derivatives, to ensure stability of the CET1 ratio. By using hedges of net investments in foreign operations, the foreign exchange component is reported in equity until realisation (unwinding of funding due to liquidation, dividend payments or other decreases in net asset value).

*Hedge effectiveness*

Hedge effectiveness is determined at the inception of the hedge relationship, as well as through periodic prospective and retrospective effectiveness assessments to ensure that a relevant relationship between the hedged item and the hedging instrument exists and remains valid.

### Effectiveness testing

For interest rates, several prospective and retrospective tests are performed to ensure the relationship between the hedged item and the hedging instrument qualifies for the hedge accounting strategy.

Prospective tests are mostly based either on a sensitivity analysis (verifying if the basis point value of the hedged portfolio relative to the hedging instrument stays within the 80-125% interval) or volume tests (if the principal amount of hedge-eligible items exceeds the notional volume of hedging instruments expected to be repriced or repaid in each specified time bucket).

For macro cashflow hedges, extensive forward-looking analyses assess the sufficient likelihood that the future volume of hedged items will largely cover the volume of hedging instruments. A hedge ratio – measuring the proportion of a portfolio that is hedged by derivatives – is calculated for each hedging strategy.

The retrospective effectiveness test of the hedge relationship is periodically carried out by comparing the change in fair value of the portfolio of hedging instruments relative to the change in fair value of the hedged eligible items imputable to the hedged risk over a given period (the ratio of fair value changes remains within the 80-125% interval).

For foreign exchange hedging, effectiveness is ensured by adjusting the sum of the nominal amount of the funding deals and foreign exchange derivatives to the targeted amount of the strategic participations.

### Sources of hedge ineffectiveness

Ineffectiveness for interest rate swaps may occur due to:

- differences in relevant terms between the hedged item and the hedging instrument (it can include discrepancies in interest curves and in periodicity);
- a reduction in volume of the hedged item that would fall under the volume of hedging instruments for any time bucket;
- the credit value adjustment on the interest rate swap not being matched by the loan. However, hedging swaps are fully collateralised or traded through clearing houses and the credit value adjustment is limited.

Regarding the hedge of the net investment in foreign currency, the interest rate component from the hedging instruments can be a source of inefficiency.

### Discontinuation of hedge accounting

Hedge accounting strategies failing the effectiveness tests are discontinued, which has an impact on profit and loss. A de-designated hedging instrument can be re-designated in a new hedge relationship. Effective hedge accounting strategies may also be discontinued for technical or strategic reasons.

## Regulatory capital

Regulatory capital for non-trading market activities totalled 19 million euros. It is used to cover foreign exchange exposures only, as KBC does not have any commodity exposures. In line with regulations, other types of non-trading market risk are covered through pillar II assessments.

# Liquidity Risk Management

Liquidity risk is the risk that an organisation will be unable to meet its liabilities and obligations as they become due, without incurring higher-than-expected costs. The principal objective of our liquidity management is to be able to fund the group and to enable the core business activities of the group to continue to generate revenue, even under adverse circumstances. Since the financial crisis, there has been a greater focus on liquidity risk management throughout the industry, and this has been intensified by the minimum liquidity standards defined by the Basel Committee.

## Strategy, policies and processes

A group-wide Liquidity Risk Management Framework is in place to define the risk playing field. Liquidity management itself is organised within the Group Treasury function, which acts as a first line of defence and is responsible for the overall liquidity and funding management of the KBC group. The Group Treasury function monitors and steers the liquidity profile on a daily basis and sets the policies and steering mechanisms for funding management (intra-group funding, funds transfer pricing).

These policies ensure that local management has an incentive to work towards a sound funding profile. The Group Treasury function also actively monitors its collateral on a group-wide basis and is responsible for drafting the liquidity contingency plan that sets out the strategies for addressing liquidity shortfalls in emergency situations.

The second line of defence (which includes the Risk function) covers all independent Support & Oversight Functions. The Risk function:

- is responsible for identifying, measuring, monitoring, reporting and stress testing liquidity risk on a group-wide basis, independently from the first line of defence;
- sets the standards via the KBC Liquidity Risk Management Framework and supports the business with its implementation;
- challenges the business on their risk identification, measurement and response.

The third line of defence is provided by internal audit, assuring an independent review and challenge of the Group's first- and second-line liquidity (risk) management processes.

A group-wide Liquidity Risk Management Framework is in place to define the risk playing field. This framework is based on the following pillars:

- **Contingency liquidity risk.** This is the risk that KBC may not be able to attract additional funds or replace maturing liabilities under stressed market conditions. This risk is assessed on the basis of liquidity stress tests, which measure how the liquidity buffer of the group's bank and insurance entities changes under extreme stressed scenarios. This buffer is based on assumptions regarding liquidity outflows (retail customer behaviour, professional client behaviour, drawing of committed credit lines, etc.) and liquidity inflows resulting from actions to increase liquidity ('repo-ing' the bond portfolio, reducing unsecured interbank lending, etc.). The liquidity



buffer has to be sufficient to cover liquidity needs (net cash and collateral outflows) over (i) a period that is required to restore market confidence in the group following a KBC-specific event, (ii) a period that is required for markets to stabilise after a general market event and (iii) a combined scenario, which takes a KBC-specific event and a general market event into account. The overall aim of the liquidity framework is to remain sufficiently liquid in stress situations, without resorting to liquidity-enhancing actions which would entail significant costs or which would interfere with the core banking and insurance business of the group;

- **Structural liquidity risk.** This is the risk that KBC's long-term assets and liabilities might not be (re)financed on time or can only be refinanced at a higher-than-expected cost. We manage our funding structure so as to maintain substantial diversification, to minimise funding concentrations in time buckets, and to limit the level of reliance on short-term wholesale funding. We manage the structural funding position as part of the integrated strategic planning process, where funding – in addition to capital, profits and risks – is one of the key elements. At present, our strategic aim is to maintain sufficiently high buffers in terms of LCR and NSFR via a group funding framework, which sets clear funding targets for the subsidiaries (own funding, reliance on intra-group funding) and provides further incentives via a system of intra-group pricing to the extent subsidiaries face a funding mismatch;

In the table below, we have illustrated the structural liquidity risk by grouping the assets and liabilities according to the remaining term to maturity (using the contractual maturity date). The difference between the cash inflows and outflows is referred to as the 'net funding gap'.

- **Operational liquidity risk.** Operational liquidity management is conducted in the treasury departments, based on estimated funding requirements. Group-wide trends in funding liquidity and funding needs are monitored on a daily basis by the Group Treasury function, ensuring that a sufficient buffer is available at all times to deal with extreme liquidity events in which no wholesale funding can be rolled over.

Besides a liquidity risk management framework and a funding management framework, standards for stress testing and policies on ILAAP (the internal liquidity adequacy assessment process), collateral management, use of public funding sources and intraday liquidity management are also in place to steer the overall liquidity risk management process.

## Scope of liquidity risk management

The Liquidity Risk Management Framework is applicable to most material entities of the KBC group that carry out banking activities, i.e. KBC Bank NV, CBC Banque SA, KBC Autolease NV, KBC Lease (Luxembourg) SA, KBC Imlease NV, KBC Lease Belgium NV, KBC Investments Limited, ČSOB Bank Group Czech Republic, ČSOB Bank Group Slovak Republic, KBC Bank Ireland, UBB, KBC Credit Investments NV, KBC Finance Ireland, KBC Commercial Finance NV, KBC IFIMA SA and K&H Bank.

## Structural liquidity risk

In the table below, we have illustrated the structural liquidity risk by grouping the assets and liabilities according to the remaining term to maturity (using the contractual maturity date). The difference between the cash inflows and outflows is referred to as the 'net funding gap'.

Liquidity risk (excluding intercompany deals)* (in billions of EUR)	<= 1 month	1-3 months	3-12 months	1-5 years	5-10 years	> 10 years	On demand	not defined	Total
<b>31-12-2019</b>									
Total inflows	13	11	46	59	41	59	6	18	254
Total outflows	33	10	9	27	5	4	141	25	254
Professional funding	13	5	1	2	0	0	0	0	21
Customer funding	16	5	5	5	2	0	141	0	174
Debt certificates	0	0	3	20	3	4	0	0	30
Other	4	-	-	-	-	-	-	25	29
Liquidity gap (excl. undrawn commitments)	-20	1	37	33	36	55	-135	-7	0
Undrawn commitments	-	-	-	-	-	-	-	38	38
Financial guarantees	-	-	-	-	-	-	-	10	10
Net funding gap (incl. undrawn commitments)	-20	1	37	33	36	55	-135	-55	-48
<b>31-12-2018</b>									
Total inflows	33	9	21	64	49	33	17	23	249
Total outflows	38	13	9	35	5	1	122	25	249
Professional funding	14	3	2	5	0	0	0	0	24
Customer funding	19	8	4	6	2	0	122	0	161
Debt certificates	1	2	3	24	3	1	0	0	34
Other	5	-	-	-	-	-	-	25	30
Liquidity gap (excl. undrawn commitments)	-5	-4	12	29	43	32	-105	-2	0
Undrawn commitments	-	-	-	-	-	-	-	37	37
Financial guarantees	-	-	-	-	-	-	-	10	10
Net funding gap (incl. undrawn commitments)	-5	-4	12	29	43	32	-105	-49	-47

\* Cashflows exclude interest rate flows consistent with internal and regulatory liquidity reporting. Inflows/outflows that arise from margin calls posted/received for MtM positions in derivatives are reported in the 'Not defined' bucket. 'Professional funding' includes all deposits from credit institutions and investment firms, as well as all repos. Instruments are classified on the basis of their first callable date. Some instruments are reported at fair value (on a discounted basis), whereas others are reported on an undiscounted basis (in order to reconcile them with Note 4.1 of the 'Consolidated financial statements' section of the 2019 Annual Report of KBC Group NV). Due to the uncertain nature of the maturity profile of undrawn commitments and financial guarantees, these instruments are reported in the 'Not defined' bucket. The 'Other' category under 'Total outflows' contains 'own equity, short positions, provisions for risks and charges, tax liabilities and other liabilities.

Table 102 - Liquidity risk (excluding intercompany deals)

Typical for the banking operations of a bank-insurance group, funding sources generally have a shorter maturity than the assets that are funded, leading to a negative net liquidity gap in the shorter time buckets and a positive net liquidity gap in the longer-term buckets. This creates liquidity risk if we would be unable to renew maturing short-term funding. Our liquidity framework imposes a funding strategy to ensure that the liquidity risk remains within the group's risk appetite.

## Liquid asset buffer

We have a solid liquidity position. At year-end 2019, the KBC group had 67 billion euros' worth of unencumbered central bank eligible assets, 58 billion euros of which in the form of liquid government bonds (86%). The remaining available liquid assets were mainly other ECB/FED eligible bonds (10%). Most of the liquid assets are expressed in our home market currencies. Available liquid assets were roughly three times the amount of net short-term wholesale funding, while funding from non-wholesale markets was accounted for by stable funding from core customer segments in our core markets.

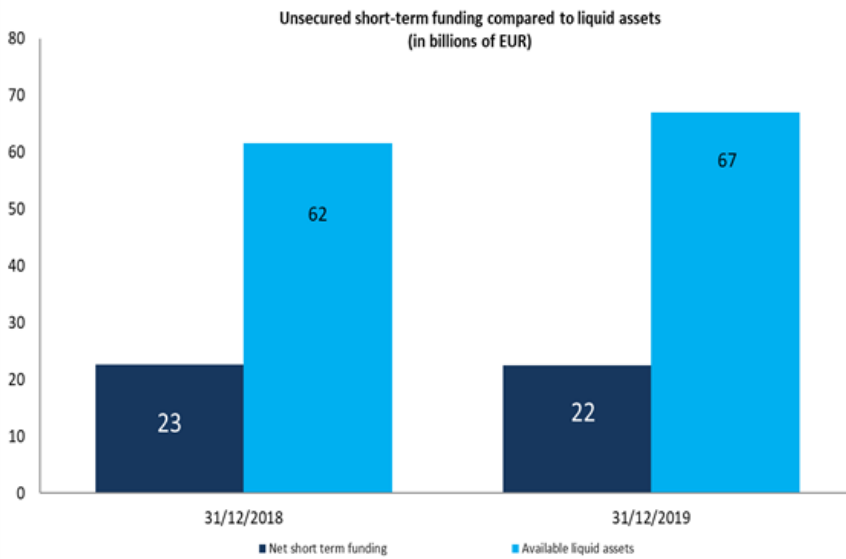


Figure 9 - Short-term unsecured funding KBC Group versus liquid assets

## Funding information

We have a strong retail/mid-cap deposit base in our core markets, resulting in a stable funding mix. A significant portion of the funding is attracted from core customer segments and markets. The KBC group's funding mix<sup>2</sup> (at 31 December 2019) can be broken down as follows:

### Funding Mix - Breakdown by type

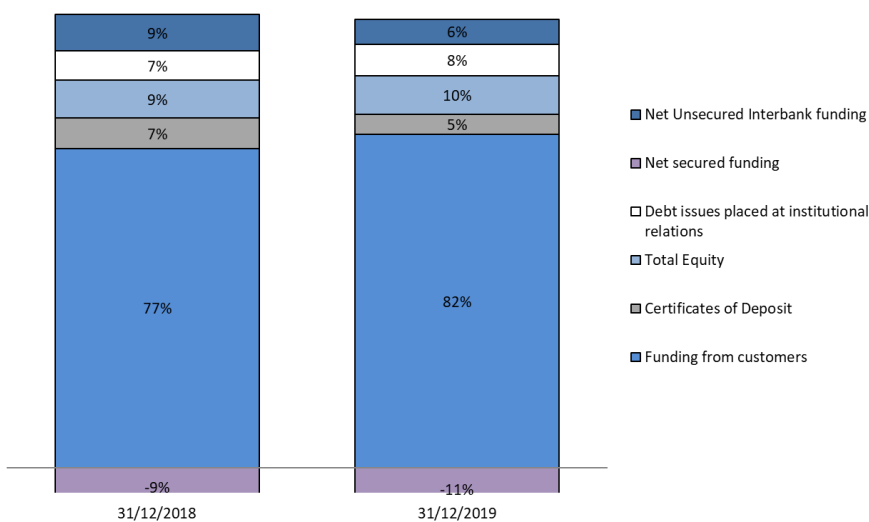


Figure 10 - Funding mix (breakdown by type)

<sup>2</sup> Please note that the funding mix graph in the quarterly General Investor Presentation excludes reverse repo transactions and wholesale lending.

- Funding from customers (circa 176 billion euros, 82% of the total figure), consisting of demand deposits, time deposits, savings deposits, other deposits, savings certificates and debt issues placed in the network. Some 76% of the funding from customers relates to private individuals and SMEs.
- Debt issues placed with institutional investors (16.8 billion euros, 8% of the total figure), mainly comprising IFIMA debt issues (0.8 billion euros), covered bonds issues (7.5 billion euros), tier-2 issues (2.0 billion euros) and KBC Group NV senior debt (5.5 billion euros).
- Net unsecured interbank funding (13.3 billion euros, 6% of the total figure), including TLTRO funding.
- Net secured funding (-23.0 billion euros in repo funding, -11% of the total figure) and certificates of deposit (10.6 billion euros, 5% of the total figure). Net secured funding was negative at year-end 2019 due to the fact that KBC carried out more reverse repo transactions than repo transactions.
- Total equity (20.4 billion euros, 10% of the total figure, including additional tier-1 (AT1) issues of 0.5 billion euros and 1.0 billion euros).

Please note that:

- in November 2012, we announced our 10-billion-euro Belgian residential mortgage covered bonds programme. This programme gives KBC access to the covered bond market, allowing it to diversify its funding structure and reduce the cost of long-term funding. No covered bonds were issued in 2019;
- in 2016 and 2017, we borrowed 4.2 billion euros and 2.3 billion euros, respectively, from the ECB under the targeted longer-term refinancing operations (TLTRO II). In 2019 we repaid all this TLTRO II funding and entered into TLTRO III for 2.5 billion euros.

## LCR and NSFR

Both the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) are defined in the Glossary. At year-end 2019, our NSFR stood at 136% while our twelve-month average LCR for 2019 came to 138%.

The LCR is based on the Delegated Act requirements. Since 31 December 2017, KBC has disclosed its 12-month average LCR in accordance with the European Banking Authority's guidelines on LCR disclosure. The NSFR is calculated based on the latest proposal for a regulation amending the CRR (Regulation (EU) No 575/2013).

## LCR quantitative information (Template EU LIQ1)

KBC Bank Consolidated (in millions of EUR)		Total unweighted value (average)				Total weighted value (average)			
		31-03-19	30-06-19	30-09-19	31-12-19	31-03-19	30-06-19	30-09-19	31-12-19
Quarter ending on									
Number of data points used in the calculation of averages		12	12	12	12	12	12	12	12
HIGH-QUALITY LIQUID									
<b>1</b>	<b>Total high-quality liquid assets (HQLA)</b>					<b>79 439</b>	<b>78 059</b>	<b>76 502</b>	<b>74 884</b>
CASH-OUTFLOWS									
2	'Retail deposits and deposits from small business customers of which:'	96 485	98 105	99 931	102 012	8 348	8 627	8 647	8 510
3	Stable deposits	41 322	39 618	43 580	51 201	2 066	1 981	2 179	2 560
4	Less stable deposits	55 157	58 477	56 326	50 771	6 275	6 636	6 444	5 911
5	Unsecured wholesale funding	75 149	74 676	74 311	73 016	49 878	48 813	48 275	46 851
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	180	90	32	0	45	23	8	0
7	Non-operational deposits (all counterparties)	70 257	68 360	67 618	66 665	45 121	42 564	41 607	40 501
8	Unsecured debt	4 712	6 226	6 660	6 351	4 712	6 226	6 660	6 351
9	Secured wholesale funding					1 684	1 309	1 570	1 361
10	Additional requirements	34 390	33 255	35 883	39 331	15 197	10 667	9 988	10 023
11	Outflows related to derivative exposures and other collateral requirements	11 571	6 738	5 778	5 537	11 533	6 699	5 776	5 537
12	Outflows related to loss of funding on debt products	58	58	58	55	58	58	58	55
13	Credit and liquidity facilities	22 760	26 459	30 047	33 739	3 606	3 910	4 154	4 431
14	Other contractual funding obligations	3 736	2 931	1 570	1 143	3 267	2 415	1 039	528
15	Other contingent funding	1 277	271	3 853	9 502	0	0	256	740
<b>16</b>	<b>TOTAL CASH OUTFLOWS</b>					<b>78 375</b>	<b>71 831</b>	<b>69 775</b>	<b>68 014</b>
CASH-INFLOWS									
17	Secured lending (e.g., reverse repos)	31 162	31 791	33 668	35 845	647	687	781	752
18	Inflows from fully performing exposures	9 102	8 250	7 530	6 554	7 659	6 984	6 449	5 588
19	Other cash inflows	18 704	14 193	13 856	13 422	13 258	8 378	7 788	7 258
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)					0	0	0	0
EU-19b	(Excess inflows from a related specialised credit institution)					0	0	0	0
<b>20</b>	<b>TOTAL CASH INFLOWS</b>	<b>58 968</b>	<b>54 234</b>	<b>55 054</b>	<b>55 821</b>	<b>21 564</b>	<b>16 050</b>	<b>15 018</b>	<b>13 599</b>
EU-	Fully exempt inflows	0	0	0	0	0	0	0	0

20a									
EU-20b	Inflows Subject to 90% Cap	0	0	0	0	0	0	0	0
EU-20c	Inflows Subject to 75% Cap	58 704	54 075	55 003	55 662	21 564	16 050	15 018	13 599
<b>21</b>	<b>LIQUIDITY BUFFER</b>					<b>79 439</b>	<b>78 059</b>	<b>76 502</b>	<b>74 884</b>
<b>22</b>	<b>TOTAL NET CASH OUTFLOWS</b>					<b>56 811</b>	<b>55 781</b>	<b>54 757</b>	<b>54 415</b>
<b>23</b>	<b>LIQUIDITY COVERAGE RATIO (%)</b>					<b>140%</b>	<b>140%</b>	<b>140%</b>	<b>138%</b>

*Table 103 - LCR quantitative information*

## Derivatives exposures and potential collateral calls

In LCR calculations, the expected net cashflows resulting from derivative transactions are taken fully into account if the cashflow occurs within the LCR horizon (e.g., net interest payment in plain vanilla IRS, notional and interest payments in CCIRS, etc.).

Contingent flows linked to derivatives that are factored into the calculation of LCR are:

- Rating downgrades on margin calls;
- Additional collateral needs resulting from the impact of an adverse market scenario.

## Currency mismatch in LCR

Although the FX position is closed by policy, there might still be a maturity mismatch in the balance sheet per currency (e.g., short-term US dollar funding with longer-term euro assets). Therefore, the volume of currency maturity mismatches in the balance sheet is also monitored.

The monitoring involves the use of liquidity ratios to address both short-term liquidity (via LCR) and structural liquidity (via NSFR), as well as the drivers behind their development (balance sheet). The main goal is to regularly monitor the underlying currency mismatch positions in order to gain an insight into the sensitivity of the cost of FX funding to market shocks.

The only material mismatch was between the US dollar and the euro in 'the less-than-6-months' maturity bucket, driven by wholesale market operations. This mismatch was closely monitored at the bi-weekly meeting of the liquidity committee.

## Asset encumbrance

KBC is a retail-oriented bank that finances 82% of its assets by means of customer funding. A certain reliance on long-term wholesale funding is tolerated and even desired for bail-in purposes, funding diversification and cost optimisation purposes. By the end of 2012, KBC received approval to set up a covered bond programme, which has further diversified the investor base and offers the bank access to funding markets that remain open in times of market stress. The regulator imposed a limit on the programme corresponding to 8% of the balance sheet of KBC Bank NV (stand-alone). When the programme reaches full capacity, it will account for about 50% of all long-term institutional wholesale funding raised by KBC. Covered bonds are not intended to increase the overall size of the balance sheet, as other sources of funding will merely be replaced by covered bonds. As a consequence, covered bonds do not negatively affect the solvency ratios or leveraging of KBC Bank.

Besides covered bonds, KBC has also rendered part of its mortgage book liquid via the creation of Residential Mortgage-Backed Securities (RMBS) notes that are almost fully retained on the balance sheet. Their prime purpose is therefore not to attract funding, but to enhance liquidity.

A relatively small part of the loan book is pledged directly as collateral for intraday liquidity and for Targeted Longer-Term Refinancing Operations (TLTROs) or other ECB funding. KBC prefers to record non-LCR collateral for these operations, thereby safeguarding the LCR-eligible liquidity buffer. Using this illiquid collateral increases encumbrance in relative terms due to the high haircut used.

KBC has imposed an internal limit of 25% on the share of secured funding in the total funding mix of KBC Bank (consolidated). In this regard, secured funding includes net repo exposure (both long term and short term), covered bonds and securitised exposure amounts issued by KBC and effectively sold on the market.

In addition to encumbered loans in the cover pool, KBC commits to maintain unencumbered cover assets (outside the cover pool) amounting to at least 5% of the total covered bond programme. This buffer can be used if there are breaches of cover asset tests, breaches of liquidity tests and breaches of committed over-collateralisation levels. The buffer should preferably be composed of mortgage loans, but can also consist of liquid ECB eligible assets. Given the regulatory imposed limit of 8% of the balance sheet, there should be more than sufficient mortgage assets available for the additional buffer.

The tables below contain median values (i.e. rolling quarterly medians over the previous 12 months and determined by interpolation), as set out under disclosure requirements for encumbered and unencumbered assets. The tables show in more detail the asset encumbrance for KBC Bank (consolidated) expressed in millions of euros. The total volume of encumbered assets amounts to 36.4 billion euros, 42% of which are debt securities (of which 14.5 billion euros issued by general governments) and 29% mortgage loans (10.6 billion euros).

Template A - Encumbered and unencumbered assets 31-12-2019		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
		010	of which notionally eligible EHQLA and HQLA 030	040	of which notionally eligible EHQLA and HQLA 050	060	of which EHQLA and HQLA 080	090	of which EHQLA and HQLA* 100
(in millions of EUR)		010	030	040	050	060	080	090	100
10	<b>Assets of the reporting institution</b>	36 352	14 805			222 192	29 327		
30	Equity instruments	0	0			1 054	0		
40	Debt securities	15 194	14 805	15 319	14 891	29 991	29 327	30 399	29 065
50	of which: covered bonds	0	0	0	0	3 446	2 984	3 446	2 984
60	of which: asset-backed securities	0	0	107	0	411	205	411	205
70	of which: issued by general governments	14 495	14 372	14 390	14 263	24 751	24 528	23 787	23 573
80	of which: issued by financial corporations	971	693	1 364	1 004	4 002	3 527	5 290	4 052
90	of which: issued by non-financial corporations	0	0	0	0	450	154	355	129
120	Other assets	21 213	0			191 062	0		
121	of which: mortgage loans	10 630	0			77 120	0		

\* EHQLA: extremely high-quality liquid assets & HQLA: high-quality liquid assets

Table 104 - Template A - Encumbered and unencumbered assets

Of the encumbered collateral received, 2.3 billion euros was accounted for by debt securities issued by general governments and financial corporations (primarily central banks), as reflected in the table below.



Template B - Collateral received 31-12-2019		Fair value of encumbered collateral received or own debt securities issued		Unencumbered Fair value of collateral received or own debt securities issued available for encumbrance	
			of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
(in millions of EUR)		010	030	040	060
130	Collateral received by the reporting institution	4 004	2 799	41 827	41 420
140	Loans on demand	0	0	0	0
150	Equity instruments	0	0	0	0
160	Debt securities	2 323	1 164	41 827	41 420
170	of which: covered bonds	0	0	179	156
180	of which: asset-backed securities	1 055	0	422	414
190	of which: issued by general governments	1 175	1 164	17 273	17 137
200	of which: issued by financial corporations	1 100	0	988	719
210	of which: issued by non-financial corporations	0	0	2	1
220	Loans and advances other than loans on demand	0	0	0	0
230	Other collateral received	1 273	1 273	0	0
240	Own debt securities issued other than own covered bonds or asset-backed securities	0	0	0	0
241	Own covered bonds and asset-backed securities issued and not yet pledged			0	0
250	<b>TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED</b>	39 445	0		

Table 105 - Template B - Collateral received

The sources of asset encumbrance (i.e. the matching financial liabilities in the table below) total 22.2 billion euros.

Template C - Sources of encumbrance 31-12-2019		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
(in millions of EUR)		010	030
10	Carrying amount of selected financial liabilities	22 155	38 968

Table 106 - Template C - Sources of encumbrance

At year-end 2019 (point-in-time), these consisted mainly of:

- Own covered bonds issued (7.5 billion euros, 38% of the total figure);
- TLTROs (2.5 billion euros, 13% of the total figure);
- OTC derivatives (6.2 billion euros, 31% of the total figure);
- Repurchase agreements (3.5 billion euros, 18% of the total figure).

## Liquidity Adequacy Assessment Process

The Liquidity Adequacy Statement (LAS) is a core element in the assessment of the bank's Internal Liquidity Adequacy Assessment Process (ILAAP) under the SSM's Supervisory Review and Evaluation Process (SREP) as set out in the ECB Guide to the ILAAP.

Based on the assessment of the Liquidity Risk Profile when the risk appetite exercise was conducted in December 2019 and on continuous reporting by Group Treasury and Group Risk, KBC Group can state that it has a solid liquidity and funding position.

A KBC ILAAP Policy describes the ILAAP architecture, i.e. the processes that are in place to support the ILAAP, the roles and responsibilities of the different stakeholders involved and the approach to be taken as regards submitting ILAAP reports, both internally and externally (to the ECB).

Based on the results of integrating all the required information and documents for the liquidity adequacy assessment process, it is KBC's opinion that the main components of the ILAAP are covered by the relevant frameworks, policies and best practices.

# Insurance Risk Management

Technical insurance risks stem from uncertainty about the frequency and severity of losses. All these risks are kept under control through appropriate underwriting, pricing, claims reserving, reinsurance and claims handling policies of line management and through independent insurance risk management.

## Strategy, scope and processes

The Group risk function develops and rolls out a group-wide framework for managing insurance risks. It is responsible for providing support for local implementation and for the functional direction of the insurance risk management process of the following insurance subsidiaries: KBC Insurance (Belgium), Maatschappij voor brandherverzekering, KBC Group Re, K&H Insurance, ČSOB Pojišť'ovna (Czech Republic), ČSOB Poist'ovňa (Slovak Republic) and DZI Insurance.

The Insurance Risk Management Framework is designed primarily around the following building blocks:

- Adequate identification and analysis of material insurance risks by, inter alia, analysing new emerging risks, concentration or accumulation risks, and developing early warning signals;
- Appropriate risk measurements and use of these measurements to develop applications aimed at guiding the company towards creating maximum shareholder value. Examples include best-estimate valuations of insurance liabilities, ex-post economic profitability analyses, natural catastrophe and other life, non-life and health exposure modelling, stress testing and required internal capital calculations;
- Stress testing and sensitivity analysis;
- Regular reporting and follow-up of the risk measurements in insurance risk reports;
- Determination of insurance risk limits and conducting compliance checks, as well as providing advice on reinsurance programmes.

## Insurance risk classification

Part of the risk identification process consists of reliably classifying all insurance risks that may be triggered by (re)insurance contracts. Under the Solvency II directive, insurance activities are split up into three main categories, namely Life, Non-life and Health.

- **Life insurance risks** are further split up into catastrophe risks and non-catastrophe risks. Life non-catastrophe risks cover the biometric risks (longevity, mortality and disability-morbidity risk), revision risk, expense risk and lapse risk related to life insurance contracts;
- **Non-life insurance risks** are further split up into catastrophe and non-catastrophe risks. Non-life non-catastrophe risks cover the premium risk, reserve risk and lapse risk related to non-life insurance contracts;
- **Health risks** are also split up into catastrophe risks and non-catastrophe risks. The latter are then further subdivided into Health Similar to Life Techniques (includes longevity, mortality, disability-morbidity, expense

risk and lapse risk) and Health Non-Similar to Life Techniques (premium and reserve risk, lapse risk). In other words, all sub-types included under 'Life' and 'Non-life' also appear in the 'Health' category.

The various sub-types of insurance risk, linked to the different insurance categories (Life, Non-life and Health) are defined as follows:

- **Catastrophe risk:** the risk that a single damaging event, or series of correlated events, of major magnitude, usually over a well-defined, short time period leads to a significant deviation in actual claims from the total expected claims. A distinction is made between natural catastrophes (e.g., wind storms, floods, earthquakes) and man-made catastrophes (e.g., terrorist attacks like 9/11). Not only the non-life, but also the life insurance business can be exposed to catastrophes, such as the pandemic threat of bird flu or accidental events;
- **Lapse risk:** the risk that the actual rate of policy lapses (i.e. premature full or partial termination of the contract by the policyholder) differs from those used in pricing;
- **Expense risk:** the risk that the cost assumptions used in pricing or valuing insurance liabilities in terms of acquisition costs, administration costs or internal settlement costs, turn out to be too optimistic;
- **Revision risk:** the potential negative deviation from the expected value of an insurance contract or a portfolio thereof due to unexpected revisions of claims. Only to be applied to annuities where the amount of the annuity may be revised during the next year;
- **Biometric risk:** the potential negative deviation from the expected value of an insurance contract or a portfolio thereof due to unexpected changes related to human life conditions;
  - Longevity risk:** the risk that the mortality rates used in pricing annuity products (or other products with negative capital at risk) turn out to be too high, i.e. people live longer than expected;
  - Mortality risk:** the risk that the mortality rates used in pricing will turn out to be too low, i.e. people die earlier than expected;
  - Disability-morbidity risk:** the risk that the part of the premium charged to cover hospitalisation or disability claims is not sufficient, due to a higher number of claims or more expensive claims than expected.
- **Premium risk:** the risk that the premium that will be earned next year will not be enough to cover all liabilities resulting from claims in this portfolio, due for instance to the fact that the number of claims will be higher than expected (frequency problem) or the severity of the claims will be higher than expected (severity problem);
- **Reserve risk:** the risk that the liabilities stemming from claims, which have occurred in the past, but have still to be finally settled, will turn out to be more expensive than expected.

## Insurance risk measurement

Within KBC, models are developed from the bottom up for all material group-wide insurance liabilities, i.e.:

- future claims that will occur over a predefined time horizon, as well as the claims settlement pattern;
- the future settlement of claims (whether already reported to the insurer or not) that have occurred in the past but have not yet been fully settled;
- the impact of the reinsurance programme on these claims.

The Group risk function uses these models to steer the group's insurance entities towards creating more shareholder value, support decisions on reinsurance, calculate the ex-post profitability of specific sub-portfolios and set off capital requirements against the relevant return in pricing insurance policies.

Insurance risk management has developed an internal model for the group-wide exposure to all non-life insurance risks, including natural hazards. This model measures the most material non-life insurance risks (catastrophe and

premium & reserve risk) for all group insurance and reinsurance companies, taking into account outward reinsurance (external and intra group). The internally developed models follow the Risk Measurement Standards and are validated within this scope by the independent validation unit.

## Insurance risk mitigation by reinsurance

The insurance portfolios are protected against the impact of large claims or the accumulation of losses by:

- limits per policy;
- diversification of the portfolio across product lines and geographical regions;
- reinsurance.

Reinsurance programmes can be divided into three main groups: property insurance, liability insurance and personal insurance. Most of the reinsurance contracts are concluded on a non-proportional basis, which provides specific cover against the impact of large loss events.

The independent insurance risk management function is responsible for:

- advising on the restructuring of the reinsurance programme during the annual negotiations;
- informing management on a quarterly basis of the top natural catastrophe claims and how these were managed and mitigated;
- conducting ad hoc analyses/deep dives following risk signals or management requests to analyse possible trends in natural catastrophe events.

## Best estimate valuations of insurance liabilities

As part of its mission to independently monitor insurance risks, the Group risk function regularly carries out in-depth studies. These confirm that there is a high degree of probability that the non-life technical provisions at subsidiary level are adequate. Various group companies conduct Liability Adequacy Tests (LAT) that meet local and IFRS requirements for life technical provisions. We make calculations using a discount rate that is set for each insurance entity based on local macroeconomic conditions and regulations.

## Technical provisions and loss triangles, non-life business

Loss triangles are developed that show claims settlement figures in the non-life business over the past few years:

- The claims-settlement figures incorporate all amounts that can be allocated to individual claims, including the Incurred But Not Reported (IBNR) and Incurred But Not Enough Reserved (IBNER) provisions, and the external claims handling expenses, but do not include internal claims settlement expenses and provisions for amounts expected to be recovered;
- All provisions for claims to be paid at the close of 2019 have been included and are before reinsurance, adjusted to eliminate intercompany amounts related to KBC Group Re.

The loss triangles are provided in the table below. The first row in the table shows the total claims burden (claims paid plus provisions) for the claims that occurred during a particular year, as estimated at the end of the year of occurrence.

The following rows indicate the situation at the end of the subsequent calendar years. We restated the amounts to reflect exchange rates at year-end 2019.

Loss triangles, KBC Insurance										
(in millions of EUR)	Year of occurrence									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate at the end of the year of occurrence	811	809	851	915	991	942	1 027	1 004	1 076	1 153
1 year later	718	711	744	770	881	798	891	885	943	–
2 years later	682	655	709	700	826	753	828	852	–	–
3 years later	679	637	684	678	805	721	813	–	–	–
4 years later	673	624	670	674	789	710	–	–	–	–
5 years later	664	617	664	665	782	–	–	–	–	–
6 years later	658	614	657	663	–	–	–	–	–	–
7 years later	658	609	645	–	–	–	–	–	–	–
8 years later	653	601	–	–	–	–	–	–	–	–
9 years later	649	–	–	–	–	–	–	–	–	–
Current estimate	649	601	645	663	782	710	813	852	943	1 153
Cumulative payments	585	542	561	580	672	571	615	615	625	481
Current provisions	63	59	84	83	109	139	198	236	318	671

Table 107 - Loss triangles, KBC Insurance

## Solvency II results and risk profile

Solvency II results and more detailed information on how all the ratios developed in 2019 are provided under 'Solvency of KBC Bank and KBC Insurance separately' in the 'How do we manage our capital?' section of the 2019 Annual Report of KBC Group NV.

The presentation below shows the solvency capital requirement (SCR) broken down by risk module, illustrating the impact of the technical insurance risk modules (Life, Non-Life and Health underwriting). It should be noted that the total SCR for the underwriting risk accounts for 50% of undiversified basic Solvency II Pillar 1 capital.

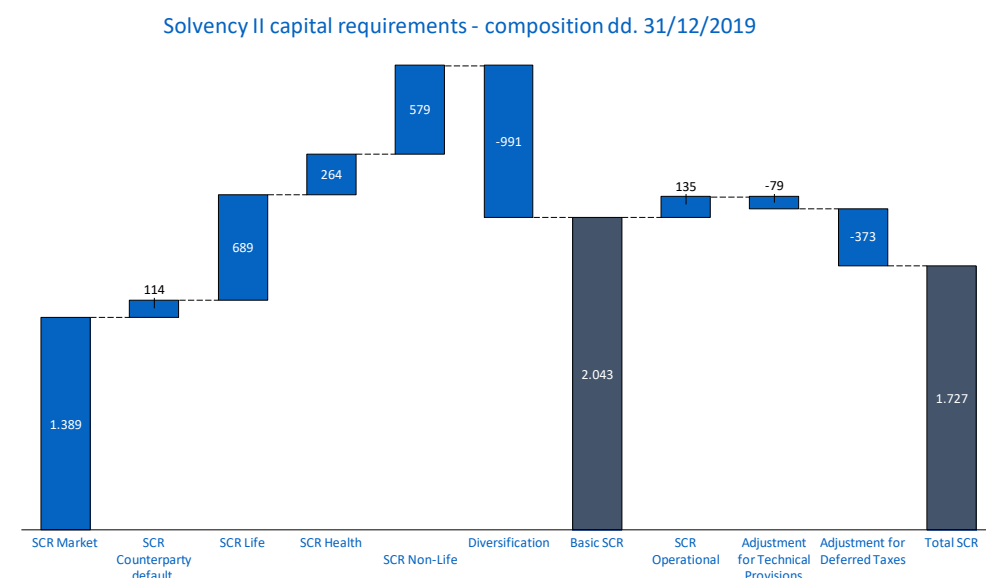


Figure 11 - Solvency II capital requirements

## Actuarial function

The Actuarial function is one of the key control functions that is defined in the Solvency II regulatory framework. Solvency II requires an Actuarial function to be installed in each insurance entity and at insurance group level. An Actuarial function holder is appointed as person responsible for the activities of the Actuarial function. Basically, the task of such a function is to ensure that the company's Board of Directors or Supervisory Board is fully informed in an independent manner. The Actuarial function:

- coordinates the calculation of technical provisions;
- ensures the appropriateness of the methodologies and underlying models used, as well as the assumptions made, in the calculation of technical provisions;
- assesses the sufficiency and quality of the data used in the calculation of technical provisions;
- compares best estimates against experience;
- informs the administrative, management or supervisory body of the reliability and adequacy of the calculation of technical provisions;
- oversees the calculation of technical provisions when there is insufficient data of appropriate quality to apply a reliable actuarial method;
- expresses an opinion on the overall underwriting policy;
- expresses an opinion on the adequacy of reinsurance arrangements;
- contributes to the effective implementation of the risk management system, in particular with respect to the risk modelling underlying the calculation of the capital requirements.

More information on the insurance activities of the group can be found under Notes 3.7 and 5.6 of the 'Consolidated financial statements' section of the 2019 Annual Report of KBC Group NV. A breakdown by business unit of earned premiums and technical charges is provided in the notes dealing with segment reporting.

# Annexes

## Annex I

### Balance sheet reconciliation

Disclosure according to Article 2 in Commission implementing regulation (EU) No 1423/2013

Capital Base (EUR)	Financial statements 31/12/19 (*)	Deconsolidation insurance	Prudential treatment	Own funds 31/12/19 (*)
Total regulatory capital, KBC Group (after profit appropriation)				20 419 026 975
Tier-1 capital				18 488 667 309
Common equity				16 988 667 384
Parent shareholders' equity	18 864 694 527	-932 115 703		17 932 578 824
Intangible fixed assets (incl. deferred tax impact) (-)	-757 179 766	31 497 132		-725 682 634
Goodwill on consolidation (incl. deferred tax impact) (-)	-877 182 802	111 598 219		-765 584 583
Minority interests				
Hedging reserve (cashflow hedges) (-)	1 331 017 801	-443 447		1 330 574 354
Valuation diff. in fin. liabilities at fair value - own credit risk (-)	-9 330 917			-9 330 917
Value adjustment due to the requirements for prudent valuation (-)				-53 575 155
Dividend payout (-)				0
Renumeration of AT1 instruments (-)			-11 064 622	-11 064 622
Deduction re. financing provided to shareholders (-)				-56 869 235
Deduction re. Irrevocable payment commitments (-)				-44 746 740
IRB provision shortfall (-)				-140 294 803
Deferred tax assets on losses carried forward (-)	-467 337 105	0		-467 337 105
Limit on deferred tax assets from timing differences relying on future profitability and significant participations in financial sector entities (-)				
Additional going concern capital	1 499 999 925			1 499 999 925
CRR compliant AT1 instruments				
Tier 2 capital				1 930 359 666
IRB provision excess (+)				130 021 752
Subordinated liabilities	2 325 615 422	-500 000 000	-25 277 507	1 800 337 914

(\*) An overview of the entities included in the financial statements of KBC Group NV and their method of consolidation is provided at <https://www.kbc.com/en/our-structure>

Table 108 - Balance sheet reconciliation



## Annex II

### Capital instruments' main features template

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

Capital instruments' main features template (1)									
1	Issuer	KBC Group NV	KBC Group NV	KBC Group NV	KBC Group NV	KBC Group NV	KBC Group NV	KBC Group NV	KBC Group NV
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	BE0003565737	BE0002592708	BE0002638196	BE0002664457	BE0002475508	BE0002290592	BE0002485606	BE0002223890
3	Governing law(s) of the instrument	Belgian	Belgian/ English	Belgian/English	Belgian/English	Belgian/ English	Belgian/ English	Belgian/ English	Belgian/ English
<i>Regulatory treatment</i>									
4	Transitional CRR rules	CET1	Additional Tier 1	Additional Tier 1	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	CET1	Additional Tier 1	Additional Tier 1	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
6	Eligible at solo/(sub) consolidated/solo & (sub-) consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated
7	Instrument type (types to be specified by each jurisdiction)	Common Equity Tier 1 instruments as published in Regulation (EU) No 575/2013 article 28	Additional Tier 1 as published in Regulation (EU) No 575/2013 article 52	Additional Tier 1 as published in Regulation (EU) No 575/2013 article 53	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 as published in Regulation (EU) No 575/2013 article 63
8	Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	EUR 6.918m	EUR 1.000m	EUR 500m	EUR 746m	EUR 175m	EUR 499m	EUR 749m	EUR 10m
9	Nominal amount of instrument	n/a	EUR 1.000m	EUR 500m	EUR 750m	EUR 175m	EUR 500m	EUR 750m	EUR 10m
9a	Issue price	Various	100%	100,00%	99.403 per cent	98.8 per cent	99.738 per cent	99.494 per cent	100.00 per cent
9b	Redemption price	n/a	At their prevailing principal amount	At their prevailing principal amount	100 per cent of their nominal amount	100 per cent of their nominal amount	100 per cent of their nominal amount	100 per cent of their nominal amount	100 per cent of their nominal amount
10	Accounting classification	Equity	Equity	Equity	Liability	Liability	Liability	Liability	Liability
11	Original date of issuance	Various	24 April 2018	5 March 2019	3/sep/19	24 July 2014, 1 August 2014 and 2 February 2015	18 September 2017	11 March 2015	6 March 2015
12	Perpetual or dated	Perpetual	Perpetual	Perpetual	dated	dated	dated	dated	dated
13	Original maturity date	No maturity	No maturity	No maturity	3/dec/29	24 July 2029	18 September 2029	11 March 2027	6 March 2025

14	Issuer call subject to prior supervisory approval	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15	Optional call date, contingent call dates, and redemption amount	No	24 October 2025 Tax Gross-up call and Tax Deductibility Call At the Prevailing Principal Amount together with accrued interest	5 March 2024 Tax Gross-up call and Tax Deductibility Call At the Prevailing Principal Amount together with accrued interest	3 December 2024 Tax Gross-up events and Tax Deductibility events Following a Capital Disqualification event EUR 100,000 per Calculation Amount	24 July 2024 Tax Gross-up events and Tax Deductibility events Following a Capital Disqualification event EUR 100,000 per Calculation Amount	18 September 2024 Tax Gross-up events and Tax Deductibility events Following a Capital Disqualification event EUR 100,000 per Calculation Amount	11 March 2022 Tax Gross-up events and Tax Deductibility events Following a Capital Disqualification event EUR 100,000 per Calculation Amount	n/a
16	Subsequent call dates, if applicable	No	on every Interest Payment Date starting with 24 October 2018 (24 April, 24 October)	on every Interest Payment Date starting with 5 March 2019 (5 September, 5 March)	n/a	n/a	n/a	n/a	n/a
<i>Coupons / dividends</i>									
17	Fixed or floating dividend/ coupon	floating	fixed and from (and including) the First Call Date and thereafter, at a fixed rate per annum reset on each Reset Date based on the prevailing Euro 5-year Mid-Swap Rate plus 3.594 per cent	fixed and from (and including) the First Call Date and thereafter, at a fixed rate per annum reset on each Reset Date based on the prevailing Euro 5-year Mid-Swap Rate plus 4.689 per cent	fixed and from (and including) the First Call Date and thereafter, at a fixed rate per annum reset on each Reset Date based on the prevailing Euribor plus 1.10 per cent	fixed and from (and including) the First Call Date and thereafter, at a fixed rate per annum reset on each Reset Date based on the prevailing Euribor plus 1.90 per cent	fixed and from (and including) the First Call Date and thereafter, at a fixed rate per annum reset on each Reset Date based on the prevailing Euribor plus 1.25 per cent	fixed and from (and including) the First Call Date and thereafter, at a fixed rate per annum reset on each Reset Date based on the prevailing Euribor plus 1.50 per cent	fixed
18	Coupon rate and any related index	n/a	4,250% per annum To be reset on every Reset Date	4,750% per annum To be reset on every Reset Date	0.50 per cent to be reset on 03 December 2024.	3.125 per cent to be reset on 24 July 2024.	1.625 per cent to be reset on 18 September 2024	1.875 per cent to be reset on 11 March 2022.	EUR 20.00 per Calculation amount
19	Existence of a dividend stopper	n/a	No	No	No	No	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Full discretionary	Fully discretionary	Fully discretionary	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Full discretionary	Fully discretionary	Fully discretionary	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory

21	Existence of step up or other incentive to redeem	n/a	No	No	No	No	No	No	No
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Cumulative	Cumulative	Cumulative	Cumulative	Cumulative
23	Convertible or non-convertible	n/a	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger (s)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
25	If convertible, fully or partially	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
26	If convertible, conversion rate	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
27	If convertible, mandatory or optional conversion	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
28	If convertible, specify instrument type convertible into	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
29	If convertible, specify issuer of instrument it converts into	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
30	Write-down features	No	Yes	Yes	No	No	No	No	No
31	If write-down, write-down trigger (s)	n/a	CET1 ratio < 5.125%	CET1 ratio < 5.125%	n/a	n/a	n/a	n/a	n/a
32	If write-down, full or partial	n/a	partially or fully	partially or fully	n/a	n/a	n/a	n/a	n/a
33	If write-down, permanent or temporary	n/a	Temporary	Temporary	n/a	n/a	n/a	n/a	n/a
34	If temporary write-down, description of write-up mechanism	n/a	Upon a Return to Financial Health, the Issuer may, at its discretion and subject to regulatory restrictions, write up the Prevailing Principal Amount of the Securities up to a maximum of the Original Principal Amount.	Upon a Return to Financial Health, the Issuer may, at its discretion and subject to regulatory restrictions, write up the Prevailing Principal Amount of the Securities up to a maximum of the Original Principal Amount.	n/a	n/a	n/a	n/a	n/a

35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Additional Tier 1	The Issuer's obligations under the Securities are unsecured and deeply subordinated, and will rank junior in priority of payment to unsubordinated creditors of the Issuer and to ordinarily subordinated indebtedness of the Issuer.	The Issuer's obligations under the Securities are unsecured and deeply subordinated, and will rank junior in priority of payment to unsubordinated creditors of the Issuer and to ordinarily subordinated indebtedness of the Issuer.	Senior debt	Senior debt	Senior debt	Senior debt	Senior debt
36	Non-compliant transitioned features	No	No	No	No	No	No	No	No
37	If yes, specify non-compliant features	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

(1) 'n/a' inserted if the question is not applicable

*Table 109 - Capital instruments' main features template*

**Capital instruments' main features template (1)**

1	Issuer	KBC Bank NV	KBC Bank NV	CBC Banque SA	KBC Ifima NV	KBC Ifima NV	KBC Ifima NV	KBC Ifima NV
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	Grouped certificates	Grouped sub. term accounts	Grouped certificates	XS0210976329	XS0238162530	total Bond Program - EUR	total Bond Program - USD
3	Governing law(s) of the instrument	Belgian	Belgian	Belgian/ English	Belgian/ English	Belgian/ English	Belgian/ English	Belgian/ English
<i>Regulatory treatment</i>								
4	Transitional CRR rules	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
6	Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated
7	Instrument type (types to be specified by each jurisdiction)	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 as published in Regulation (EU) No 575/2013 article 63
8	Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	EUR 1,654 m	EUR 0,795 m	EUR 0,04 m	EUR 133,523 m	EUR 9,389 m	EUR 2,073 m	EUR 0,042 m
9	Nominal amount of instrument	EUR 30,091 m	EUR 12,521 m	EUR 0,481 m	USD 150m	SKK 1 450m	EUR 30,713 m	USD 1 m
9a	Issue price				EUR 115m	EUR 48m	100,08%	99,00%
9b	Redemption price	At par	At par	At par	At par	At par	At par	At par
10	Accounting classification	Liability	Liability	Liability	Liability	Liability	Liability	Liability
11	Original date of issuance	2010 (various dates)	2010 (various dates)	2010 & 2011 (various dates)	7/feb/05	38707	2008 & 2010 (various dates)	2008 (various dates)
12	Perpetual or dated	Dated	Dated	Dated	dated	dated	dated	dated
13	Original maturity date	10 Years after issuance	10 Years after issuance	10 Years after issuance	7/feb/25	44186	2020 (various dates)	2020 (various dates)
14	Issuer call subject to prior supervisory approval	n/a	n/a	n/a	n/a	n/a	n/a	n/a
15	Optional call date, contingent call dates, and redemption amount	n/a	n/a	n/a	n/a	n/a	n/a	n/a
16	Subsequent call dates, if applicable	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Coupons / dividends</i>								
17	Fixed or floating dividend/coupon				Floating (CMS-linked)	Fixed	Fixed	Fixed
18	Coupon rate and any related index				0,04692	0,0405		
19	Existence of a dividend stopper	No	No	No	No	No	No	No

20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
21	Existence of step up or other incentive to redeem	No	No	No	No	No	No	No
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger (s)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
25	If convertible, fully or partially	n/a	n/a	n/a	n/a	n/a	n/a	n/a
26	If convertible, conversion rate	n/a	n/a	n/a	n/a	n/a	n/a	n/a
27	If convertible, mandatory or optional conversion	n/a	n/a	n/a	n/a	n/a	n/a	n/a
28	If convertible, specify instrument type convertible into	n/a	n/a	n/a	n/a	n/a	n/a	n/a
29	If convertible, specify issuer of instrument it converts into	n/a	n/a	n/a	n/a	n/a	n/a	n/a
30	Write-down features	No	No	No	No	No	No	No
31	If write-down, write-down trigger (s)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
32	If write-down, full or partial	n/a	n/a	n/a	n/a	n/a	n/a	n/a
33	If write-down, permanent or temporary	n/a	n/a	n/a	n/a	n/a	n/a	n/a
34	If temporary write-down, description of write-up mechanism	n/a	n/a	n/a	n/a	n/a	n/a	n/a
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior debt	Senior debt	Senior debt	Senior debt	Senior debt	Senior debt	Senior debt
36	Non-compliant transitioned features	No	No	No	No	No	No	No
37	If yes, specify non-compliant features	n/a	n/a	n/a	n/a	n/a	n/a	n/a

(1) 'n/a' inserted if the question is not applicable

Table 110 - Capital instruments' main features template

## Annex III

### Transitional own funds disclosure template

Disclosure according to Article 5 in Commission implementing regulation (EU) No 1423/2013

<b>Common Equity Tier 1 capital: instruments and reserves (1)</b>			
		(A) amount at disclosure date	(B) regulation (eu) no 575/2013 article reference
1	Capital instruments and the related share premium accounts	6 955 353 525	26 (1), 27, 28, 29
	of which: Instrument type 1	n/a	EBA list 26 (3)
	of which: Instrument type 2	n/a	EBA list 26 (3)
	of which: Instrument type 3	n/a	EBA list 26 (3)
2	Retained earnings	10 103 841 006	26 (1) (c)
3	Accumulated other comprehensive income (and any other reserves)	-1 102 769 797	26 (1)
3a	Funds for general banking risk	n/a	26 (1) (f)
4	Amount of qualifying items referred to in Article 484 (3) and the related share premium accounts subject to phase out from CET1	n/a	486 (2)
5	Minority interests (amount allowed in consolidated CET1)	0	84
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	1 967 519 895	26 (2)
<b>6</b>	<b>Common Equity Tier 1 (CET1) capital before regulatory adjustments</b>	<b>17 923 944 629</b>	<b>Sum of rows 1 to 5a</b>
<b>Common Equity Tier 1 (CET1) capital: regulatory adjustments</b>			
7	Additional value adjustments (negative amount)	-53 575 155	34, 105
8	Intangible assets (net of related tax liability) (negative amount)	-1 491 267 217	36 (1) (b), 37
9	Empty set in the EU		
10	Deferred tax assets that rely on future profitability excluding those arising from temporary difference (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	-467 337 105	36 (1) (c), 38
11	Fair value reserves related to gains or losses on cashflow hedges	1 330 574 354	33 (1) (a)
12	Negative amounts resulting from the calculation of expected loss amounts	-140 294 803	36 (1) (d), 40, 159
13	Any increase in equity that results from securitised assets (negative amount)	n/a	32 (1)
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	-9 330 917	33 (1) (b)
15	Defined-benefit pension fund assets (negative amount)	n/a	36 (1) (e), 41
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	-59 299 662	36 (1) (f), 42
17	Direct, indirect and synthetic holdings of the CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	n/a	36 (1) (g), 44
18	Direct, indirect and synthetic holdings of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	n/a	36 (1) (h), 43, 45, 46, 49 (2) (3), 79
19	Direct, indirect and synthetic holdings of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	n/a	36 (1) (i), 43, 45, 47, 48 (1) (b), 49 (1) to (3), 79
20	Empty set in the EU		

20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	n/a	36 (1) (k)
20b	of which: qualifying holdings outside the financial sector (negative amount)	n/a	36 (1) (k) (i), 89 to 91
20c	of which: securitisation positions (negative amount)	n/a	36 (1) (k) (ii) 243 (1) (b) 244 (1) (b) 258
20d	of which: free deliveries (negative amount)	n/a	36 (1) (k) (iii), 379 (3)
21	Deferred tax assets arising from temporary difference (amount above 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	n/a	36 (1) (c), 38, 48 (1) (a)
22	Amount exceeding the 15% threshold (negative amount)	n/a	48 (1)
23	of which: direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities	n/a	36 (1) (i), 48 (1) (b)
24	Other deductions	-44 746 740	
25	of which: deferred tax assets arising from temporary difference	n/a	36 (1) (c), 38, 48 (1) (a)
25a	Losses for the current financial year (negative amount)	n/a	36 (1) (a)
25b	Foreseeable tax charges relating to CET1 items (negative amount)	n/a	36 (1) (l)
27	Qualifying AT1 deductions that exceeds the AT1 capital of the institution (negative amount)	n/a	36 (1) (j)
<b>28</b>	<b>Total regulatory adjustments to Common Equity Tier 1 (CET1)</b>	<b>-935 277 245</b>	<b>Sum of rows 7 to 20a, 21, 22 and 25a to 27</b>
<b>29</b>	<b>Common Equity Tier 1 (CET1) capital</b>	<b>16 988 667 384</b>	<b>Row 6 minus row 28</b>
<b>Additional Tier 1 (AT1) capital: instruments</b>			
30	Capital instruments and the related share premium accounts	1 499 999 925	51, 52
31	of which: classified as equity under applicable accounting standards	1 499 999 925	
32	of which: classified as liabilities under applicable accounting standards	n/a	
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1	n/a	486 (3)
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interest not included in row 5) issued by subsidiaries and held by third parties	n/a	85, 86
35	of which: instruments issued by subsidiaries subject to phase-out	n/a	486 (3)
<b>36</b>	<b>Additional Tier 1 (AT1) capital before regulatory adjustments</b>	<b>1 499 999 925</b>	
<b>Additional Tier 1 (AT1) capital: regulatory adjustments</b>			
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	n/a	52 (1) (b), 56 (a), 57
38	Holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	n/a	56 (b), 58
39	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	n/a	56 (c), 59, 60, 79
40	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	n/a	56 (d), 59, 79



41	Empty set in EU	n/a	
42	Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)	n/a	56 (e)
<b>43</b>	<b>Total regulatory adjustments to Additional Tier 1 (AT1) capital</b>	<b>0</b>	<b>sum of rows 37 to 42</b>
<b>44</b>	<b>Additional Tier 1 (AT1) capital</b>	<b>1 499 999 925</b>	<b>Row 36 minus row 43</b>
<b>45</b>	<b>Tier 1 capital (T1 = CET1 + AT1)</b>	<b>18 488 667 309</b>	<b>Sum of row 29 and row 44</b>
<b>Tier 2 (T2) capital: instruments and provisions</b>			
46	Capital instruments and the related share premium accounts	1 678 113 213	62, 63
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2	n/a	486 (4)
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interest and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third party	122 224 702	87, 88
49	of which: instruments issued by subsidiaries subject to phase-out	n/a	486 (4)
50	Credit risk adjustments	130 021 752	62 (c) & (d)
<b>51</b>	<b>Tier 2 (T2) capital before regulatory adjustment</b>	<b>1 930 359 666</b>	
<b>Tier 2 (T2) capital: regulatory adjustments</b>			
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	n/a	63 (b) (i), 66 (a), 67
53	Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institutions designed to inflate artificially the own funds of the institution (negative amount)	n/a	66 (b), 68
54	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10 % threshold and net of eligible short positions) (negative amount)	n/a	66 (c), 69, 70, 79
55	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amounts)	n/a	66 (d), 69, 79
56	Empty set in EU	n/a	
<b>57</b>	<b>Total regulatory adjustments to Tier 2 (T2) capital</b>	<b>0</b>	<b>Sum of rows 52 to 56</b>
<b>58</b>	<b>Tier 2 (T2) capital</b>	<b>1 930 359 666</b>	<b>Row 51 minus row 57</b>
<b>59</b>	<b>Total capital (TC = T1 + T2)</b>	<b>20 419 026 975</b>	<b>Sum of row 45 and row 58</b>
<b>60</b>	<b>Total risk-weighted assets</b>	<b>99 071 194 511</b>	
<b>Capital ratios and buffers</b>			
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	17.15%	92 (2) (a)
62	Tier 1 (as a percentage of total risk exposure amount)	18.66%	92 (2) (b)
63	Total capital (as a percentage of total risk exposure amount)	20.61%	92 (2) (c)
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements plus a systemic risk buffer, plus systemically important institution buffer expressed as a percentage of total risk exposure amount)	8.93%	CRD 128, 129, 140
65	of which: capital conservation buffer requirement	2.50%	
66	of which: countercyclical buffer requirement	0.43%	
67	of which: systemic risk buffer requirement	0.00%	

67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	1.50%	CRD 131
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	10.90%	CRD 128
69	[non-relevant in EU regulation]		
70	[non-relevant in EU regulation]		
71	[non-relevant in EU regulation]		
<b>Amounts below the thresholds for deduction (before risk-weighting)</b>			
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	68 157 748	36 (1) (h), 45, 46, 56 (c), 59, 60, 66 (c), 69, 70
73	Direct and indirect holdings of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	123 952	36 (1) (i), 45, 48, 470, 472 (11)
74	Empty set in the EU		
75	Deferred tax assets arising from temporary difference (amount below 10 % threshold, net of related tax liability where the conditions in Article 38 (3) are met)	412 526 209	36 (1) (c), 38, 48
<b>Applicable caps on the inclusion of provisions in Tier 2</b>			
76	Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	n/a	62
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	n/a	62
78	Credit risk adjustments included in T2 in respect of exposures subject to internal rating-based approach (prior to the application of the cap)	130 021 752	62
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	396 992 036	62
<b>Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2014 and 1 Jan 2022)</b>			
80	- Current cap on CET1 instruments subject to phase-out arrangements	n/a	484 (3), 486 (2) & (5)
81	- Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	n/a	484 (3), 486 (2) & (5)
82	- Current cap on AT1 instruments subject to phase-out arrangements	n/a	484 (4), 486 (3) & (5)
83	- Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	n/a	484 (4), 486 (3) & (5)
84	- Current cap on T2 instruments subject to phase-out arrangements	n/a	484 (5), 486 (4) & (5)
85	- Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	n/a	484 (5), 486 (4) & (5)

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

Table 111 - Transitional own funds disclosure template

## Annex IV

### CET 1 requirement

Joint Capital Decision (JCD) 2018 Target applicable in		31/12/2018	27/03/2020
Pillar 1 minimum requirement (P1 min)	CET1	4.50%	4.50%
	AT1	1.50%	1.50%
	T2	2.00%	2.00%
Pillar 2 requirement (P2R)	CET1	1.75%	1.75%
	AT1		
	T2		
<b>Total SREP Capital Requirement (TSCR) = LOWER BOUNDARY</b>	CET1	6.25%	6.25%
	Tier 1	7.75%	7.75%
	Total capital	9.75%	9.75%
Combined Buffer Requirement (CBR)			
Conservation buffer	CET1	2.50%	2.50%
Systemic risk buffer	CET1	0.00%	0.00%
O-SII buffer	CET1	1.50%	1.50%
Countercyclical buffer	CET1	0.45%	0.30%
<b>Overall Capital Requirement (OCR) = MDA threshold</b>	CET1	10.70%	10.55%
	Tier 1	12.20%	12.05%
	Total capital	14.20%	14.05%
Pillar 2 Guidance (P2G)	CET1	1.00%	1.00%
<b>OCR+ P2G</b>	CET1	11.70%	11.55%
	Tier 1		12.55%
	Total capital		15.55%
Entity specific buffer	CET1		2,45% - 4,15%
<b>Management target = UPPER BOUNDARY</b>	CET1		14,0% - 15,7%
	Tier 1		15,5% - 17,2%
	Total capital		17,5% - 19,2%

Table 112 - CET 1 requirement

## Annex V

### Explanations of differences between accounting and regulatory exposures amounts

#### EU LIA: Explanations of differences between accounting and regulatory exposures amounts

The general rule under CRR/CRD IV for insurance participations is that an insurance participation is deducted from common equity at group level, unless the competent authority grants permission to apply a risk weighting instead (Danish compromise). KBC received such permission from the supervisory authority and hence reports its solvency on the basis of a 370% risk weighting being applied to the holdings of own fund instruments of the insurance company (= 2 469 million euros), after having deconsolidated KBC Insurance from the group figures. For the KBC group, this implies that the carrying values, which are presented based on the scope of regulatory consolidation, are treated in the same way as under the CRR/CRV, whereby KBC Insurance is deconsolidated from the group figures.

Table 113 - EU LIA\_ Explanations of differences between accounting and regulatory exposures amounts

## Annex VI

### EU INS1\_Non-deducted participations in insurance undertakings

EU INS1 – Non-deducted participations in insurance undertakings	Value (EUR)
Holdings of own funds instruments of a financial sector entity where the institution has a significant investment not deducted from own funds (before risk weighting)	2 468 506 140
Total RWAs	9 133 472 718

Table 114 - EU INS1\_Non-deducted participations in insurance undertakings

## Annex VII

### EU LI1\_Differences between accounting and regulatory scopes of consolidation

EU LI1: Differences between accounting and regulatory scopes of consolidation  (in millions of EUR)	31-12-2019	31-12-2019
	a) Carrying values as reported in published financial statements	b) Carrying values under scope of regulatory consolidation
Cash, cash balances at central banks and other demand deposits from credit institutions	8 356	8 328
Financial assets	273 399	238 721
Amortised cost	230 639	225 114
Fair value through OCI	19 037	5 892
Fair value through profit or loss	23 563	7 557
Of which held for trading	7 266	7 305
Hedging derivatives	158	158
Reinsurers' share in technical provisions, insurance	121	
Fair value adjustments of hedged items in portfolio hedge of interest rate risk	478	478
Tax assets	1 396	1 351
Non-current assets held for sale and assets associated with disposal groups	29	1
Investments in associated companies and joint ventures	25	2 494
Property, equipment and investment property	3 818	3 520
Goodwill and other intangible assets	1 640	1 497
Other assets	1 474	856
<b>Total Assets</b>	<b>290 735</b>	<b>257 245</b>
Financial liabilities	248 400	235 543
Amortised cost	224 093	224 844
Fair value through profit or loss	23 137	9 528
Of which held for trading	6 988	6 989
Hedging derivatives	1 171	1 171
Technical provisions, before reinsurance	18 560	
Fair value adjustments of hedged items in portfolio hedge of interest rate risk	-122	-122
Tax liabilities	478	109
Liabilities associated with disposal groups	0	0
Provisions for risks and charges	227	222
Other liabilities	2 827	2 070
<b>Total Liabilities</b>	<b>270 371</b>	<b>237 822</b>
Parent shareholders' equity	18 865	17 922
Additional Tier-1 instruments included in equity	1 500	1 500
Minority interests	0	0
<b>Total Equity</b>	<b>20 365</b>	<b>19 422</b>
<b>Total Liabilities and Equity</b>	<b>290 735</b>	<b>257 245</b>

Table 115 - EU LI1\_Differences between accounting and regulatory scopes of consolidation

## Annex VIII

### EU LI3\_Outline of the differences in the scope of consolidation (entity by entity)

EU LI3_Outline of the differences in the scope of consolidation (entity by entity) - 31-12-2019	a	b	c	d	e	f
Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Neither consolidated nor deducted	Deducted	
KBC Bank NV	Full consolidation	x				credit institution
Almafin Real Estate NV	Full consolidation	x				real estate
Almafin Real Estate Services NV	Full consolidation	x				real estate
Apicinq NV	Full consolidation	x				real estate
Immo Arenberg NV	Full consolidation	x				real estate
Bel Rom Sapte-S.R.L.	Full consolidation	x				leasing
CBC BANQUE SA	Full consolidation	x				credit institution
Československá Obchodná Banka a.s.	Full consolidation	x				credit institution
ČSOB Leasing a.s.	Full consolidation	x				leasing
ČSOB Leasing Poist'ovaci Maklér s.r.o.	Full consolidation	x				leasing support
ČSOB Real, s.r.o.	Full consolidation	x				facilities management and support services
ČSOB Stavebná Sporiteľ'na a.s.	Full consolidation	x				building society
Československá Obchodní Banka a.s.	Full consolidation	x				credit institution
Bankovní Informační Technologie s.r.o.	Full consolidation	x				automatic data processing
Českomoravská Stavební Spořitel'na (ČMSS)	Full consolidation	x				credit institution
ČSOB Advisory a.s.	Full consolidation	x				investment administration
ČSOB Factoring a.s.	Full consolidation	x				factoring
ČSOB Leasing a.s.	Full consolidation	x				leasing
ČSOB Leasing Pojist'ovaci Maklér s.r.o.	Full consolidation	x				leasing support
ČSOB Penzijní společnost a.s.	Full consolidation	x				pension insurance fund
Hypoteční Banka a.s.	Full consolidation	x				mortgage credit institution
Patria Finance a.s.	Full consolidation	x				online securities trading
Patria Finance CF a.s.	Full consolidation	x				agent and consulting services

Radlice Rozvojová a.s.	Full consolidation	x				real estate
Ušetřeno.cz s.r.o.	Full consolidation	x				portal for price comparison
Ušetřeno.cz Finanční služby, a.s.	Full consolidation	x				portal for price comparison
C Plus SAS	Full consolidation	x				real estate
Hello Shopping Park S.R.L.	Full consolidation	x				leasing
Julienne Holdings S.à.r.l.	Full consolidation	x				holding
Julie LH BVBA	Full consolidation	x				real estate
KBC Asset Management NV	Full consolidation	x				asset management
ČSOB Asset Management, a.s., Investiční Společnost	Full consolidation	x				asset management
KBC Asset Management SA	Full consolidation	x				asset management
KBC Fund Management Limited	Full consolidation	x				asset management
KBC Asset Management Participations	Full consolidation	x				asset management
KBC Autolease NV	Full consolidation	x				leasing
KBC Lease (Luxembourg) SA	Full consolidation	x				leasing
KBC Bail Immobilier France sas	Full consolidation	x				leasing
KBC Bank Ireland Plc.	Full consolidation	x				credit institution
Danube Holdings Limited	Full consolidation	x				real estate
Glare Nominee Limited	Full consolidation	x				non-active
IIB Finance DAC	Full consolidation	x				commercial and financial loans
IIB Homeloans and Finance Limited	Full consolidation	x				holding
Premier Homeloans Limited	Full consolidation	x				home loans
KBC ACS Limited	Full consolidation	x				non-active
KBC Mortgage Finance	Full consolidation	x				mortgage finance
KBC Nominees Limited	Full consolidation	x				non-active
Intercontinental Finance	Full consolidation	x				leasing
Linkway Developments Limited	Full consolidation	x				non-active
Merrion Commercial Leasing Limited	Full consolidation	x				leasing
Merrion Equipment Finance Limited	Full consolidation	x				non-active
Merrion Leasing Assets Limited	Full consolidation	x				non-active
Merrion Leasing Finance Limited	Full consolidation	x				non-active
Merrion Leasing Industrial Limited	Full consolidation	x				non-active
Merrion Leasing Limited	Full consolidation	x				non-active
Merrion Leasing Services Limited	Full consolidation	x				leasing
Monastersky Limited	Full consolidation	x				holding
Needwood Properties Limited	Full consolidation	x				real estate

Phoenix Funding 2 DAC	Full consolidation	x			securitisation vehicle
Phoenix Funding 3 DAC	Full consolidation	x			securitisation vehicle
Phoenix Funding 4 DAC	Full consolidation	x			securitisation vehicle
Phoenix Funding 5 DAC	Full consolidation	x			securitisation vehicle
Phoenix Funding 6 DAC	Full consolidation	x			securitisation vehicle
KBC Commercial Finance NV	Full consolidation	x			factoring
KBC Credit Investments NV	Full consolidation	x			investments
KBC Finance Ireland	Full consolidation	x			non-active
KBC IFIMA SA	Full consolidation	x			financing
KBC Immolease NV	Full consolidation	x			leasing
KBC Investments Limited	Full consolidation	x			stock exchange brokers
KBC Lease Belgium NV	Full consolidation	x			leasing
KBC Real Estate Luxembourg SA	Full consolidation	x			real estate
KBC Vastgoedinvesteren NV	Full consolidation	x			real estate
KBC Vastgoedportefeuille België NV	Full consolidation	x			real estate
KBC Securities NV	Full consolidation	x			stock exchange brokers
K&H Bank Zrt.	Full consolidation	x			credit institution
K&H Autópark Bérleti és Szolgáltató Kft	Full consolidation	x			fleet management
K&H Befektetési Alapkezelő Zrt.	Full consolidation	x			security broking and fund management
K&H Csoporszolgáltató Központ Kft.	Full consolidation	x			accounting and tax collector activity
K&H Equities Tanácsadó Zrt.	Full consolidation	x			business and management consultancy
K&H Értékpapír Zártkörűen Működő Részvénytársaság Zrt.	Full consolidation	x			stockbroker
K&H Faktor Pénzügyi Szolgáltató Zrt.	Full consolidation	x			factoring
K&H Ingatlanlizing Zrt	Full consolidation	x			leasing
K&H Jelzálogbank Zrt.	Full consolidation	x			other credit granting services
Loan Invest NV "Institutionele VBS naar Belgisch recht"	Full consolidation	x			securitisation company
Midas Life Settlements LLC	Full consolidation	x			life settlement service provider
Poelaert Invest NV	Full consolidation	x			real estate
Reverse Mortgage Loan Trust 2008-1	Full consolidation	x			reverse mortgages
TBI SAS	Full consolidation	x			real estate
UBB Interlease EAD	Full consolidation	x			leasing
United Bulgarian Bank AD	Full consolidation	x			credit institution
East Golf Properties EAD	Full consolidation	x			real estate
UBB Center Management EOOD	Full consolidation	x			real estate
UBB Asset Management AD	Full consolidation	x			asset management



UBB Insurance Broker AD	Full consolidation	x			insurance agents and brokers
UBB Factoring EOOD	Full consolidation	x			factoring
Almaloisir & Immobilier sas	Not consolidated (full consolidation)			x	Immaterial - real estate
Brussels North Distribution NV	Not consolidated (full consolidation)			x	Immaterial - real estate
ČSOB Advisory, s.r.o.	Not consolidated (full consolidation)			x	Immaterial - strategic advice for companies
ČSOB Nadácia	Not consolidated (full consolidation)			x	Immaterial - real estate
Eurincasso s.r.o.	Not consolidated (full consolidation)			x	Immaterial - debts recovery
Francilia Immobilier SARL	Not consolidated (full consolidation)			x	Immaterial - buying and selling of own real estate
Immo-Antares NV	Not consolidated (full consolidation)			x	Immaterial - issuance of real estate certificates
Immo-Basilix NV	Not consolidated (full consolidation)			x	Immaterial - issuance of real estate certificates
Immo-Beaulieu NV	Not consolidated (full consolidation)			x	Immaterial - issuance of real estate certificates
Immobilier Distri-Land NV	Not consolidated (full consolidation)			x	Immaterial - issuance of real estate certificates
Immo Genk-Zuid NV	Not consolidated (full consolidation)			x	Immaterial - issuance of real estate certificates
Immolease-Trust NV	Not consolidated (full consolidation)			x	Immaterial - real estate
Immo Lux-Airport SA	Not consolidated (full consolidation)			x	Immaterial - issuance of real estate certificates
Immo Mechelen City Center NV	Not consolidated (full consolidation)			x	Immaterial - real estate investment-office
Immo NamOtt NV	Not consolidated (full consolidation)			x	Immaterial - issuance of real estate certificates
Immo NamOtt Tréfonds NV	Not consolidated (full consolidation)			x	Immaterial - issuance of real estate certificates
Immo-Quinto NV	Not consolidated (full consolidation)			x	Immaterial - real estate
Immo Retail Libramont BV	Not consolidated (full consolidation)			x	Immaterial - issuance of real estate certificates
Vanhee Construction Invest BVBA	Not consolidated (full consolidation)			x	Immaterial - real estate
Immo-Zénobe Gramme NV	Not consolidated (full consolidation)			x	Immaterial - issuance of real estate certificates
Juliette FH BVBA	Not consolidated (full consolidation)			x	Immaterial - real estate
K&H Pénzforgalmi Szolgáltató Korlátolt Felelősségű Társaság	Not consolidated (full consolidation)			x	Immaterial - payment services
KB-Consult NV	Not consolidated (full consolidation)			x	Immaterial - non-active
KBC Financial Products (Cayman Islands) Limited "Cayman I"	Not consolidated (full consolidation)			x	Immaterial - stock exchange brokers
KBC Financial Services (Ireland) Limited	Not consolidated (full consolidation)			x	Immaterial - holding
KBC Net Lease Investments LLC	Not consolidated (full consolidation)			x	Immaterial - leasing

KBC Securities USA LLC	Not consolidated (full consolidation)			x		Immaterial - stockbroker
KBC Focus Fund NV	Not consolidated (full consolidation)			x		Immaterial - investment fund
Luxembourg North Distribution SA	Not consolidated (full consolidation)			x		Immaterial - issuance of real estate certificate
Motokov a.s.	Not consolidated (full consolidation)			x		Immaterial - vehicles
Patria investiční společnost, a.s.	Not consolidated (full consolidation)			x		Immaterial - asset management
RHVG DK NV	Not consolidated (full consolidation)			x		Immaterial - issuance of real estate certificates
RHVG QT NV	Not consolidated (full consolidation)			x		Immaterial - issuance of real estate certificates
RHVG RB NV	Not consolidated (full consolidation)			x		Immaterial - issuance of real estate certificates
RHVG SB NV	Not consolidated (full consolidation)			x		Immaterial - issuance of real estate certificates
RHVG TB NV	Not consolidated (full consolidation)			x		Immaterial - issuance of real estate certificates
Soluz.io NV	Not consolidated (full consolidation)			x		Immaterial - software company
SPINC SASU	Not consolidated (full consolidation)			x		Immaterial - buying and selling of own real estate
Start it X NV	Not consolidated (full consolidation)			x		Immaterial - support for start-ups
Top-Pojištění.cz s.r.o.	Not consolidated (full consolidation)			x		Immaterial - insurance arranging
Weyveld Vastgoedmaatschappij NV	Not consolidated (full consolidation)			x		Immaterial - issuance of real estate certificates
World Alliance Financial LLC	Not consolidated (full consolidation)			x		Immaterial - reverse mortgages
Bancontact Payconiq Company NV	Equity method		x			other support activ. relating to financial services
Cash Service Company AD	Equity method		x			agents and brokers in banking services
Joyn International NV	Equity method		x			IT & Consultancy
MallPay, s.r.o.	Equity method		x			payment services
Payconiq International S.A.	Equity method		x			payment services
Payconiq Services B.V.	Equity method		x			payment services
Joyn Belgium NV	Not consolidated (Equity method)			x		Immaterial - digital loyalty card
Citie NV	Not consolidated (Equity method)			x		Immaterial - digital loyalty card
Joyn Urban Services BVBA	Not consolidated (Equity method)			x		Immaterial - digital loyalty card
Isabel NV	Equity method		x			ICT
Banking Funding Company NV	Not consolidated (Equity method)			x		Immaterial - payment services
BRS Microfinance Coop cvba	Not consolidated (Equity method)			x		Immaterial - investment fund
Czech Banking Credit Bureau a.s.	Not consolidated (Equity method)			x		Immaterial - ICT
ENGIE REN s.r.o.	Not consolidated (Equity method)			x		Immaterial - rental services
Gasco Group NV	Not consolidated (Equity method)			x		Immaterial - wholesale of industrial chemical products

Gemma Frisius-Fonds K.U. Leuven	Not consolidated (Equity method)			x		Immaterial - risk capital
Go Connect BV	Not consolidated (Equity method)			x		Immaterial - payment services
Justinvest NV	Not consolidated (Equity method)			x		Immaterial - real estate
První Certifikační Autorita a.s.	Not consolidated (Equity method)			x		Immaterial - certification services
Rabot Invest NV	Not consolidated (Equity method)			x		Immaterial - real estate
Sympl NV	Not consolidated (Equity method)			x		Immaterial - online talent recruiter
Thanksys NV	Not consolidated (Equity method)			x		Immaterial - IT & Consultancy
KBC Verzekeringen NV	Full consolidation				x	insurance company
ADD NV	Full consolidation				x	insurance broker
KBC Group Re SA	Full consolidation				x	reinsurance company
ČSOB Pojišť'ovna a.s.	Full consolidation				x	insurance company
ČSOB Poist'ovňa a.s.	Full consolidation				x	insurance company
Double U Building BV	Full consolidation				x	real estate
DZI Life Insurance Jsc	Full consolidation				x	life insurance
DZI - GENERAL INSURANCE JSC	Full consolidation				x	non-life insurance
Groep VAB NV	Full consolidation				x	holding
VAB NV	Full consolidation				x	travel assistance
K&H Biztosító Zrt	Full consolidation				x	insurance company
KBC Verzekeringen Vastgoed Nederland I BV	Full consolidation				x	real estate
ČSOB Pojišť'ovací servis, s. r. o.	Not consolidated (full consolidation)			x		Immaterial - insurance broker
Depannage 2000 NV	Not consolidated (full consolidation)			x		Immaterial - vehicles
Maatschappij voor Brandherverzekering cvba	Not consolidated (full consolidation)			x		Immaterial - reinsurance
Olympus Mobility NV	Not consolidated (full consolidation)			x		Immaterial - computer programming
Omnia NV	Not consolidated (full consolidation)			x		Immaterial - travel agency
Pardubická Rozvojová, a.s.	Not consolidated (full consolidation)			x		Immaterial - real estate
Probemo Dubbele Bedieningen NV	Not consolidated (full consolidation)			x		Immaterial - driving school
Sportcomplex Aalst NV	Not consolidated (full consolidation)			x		Immaterial - rental of leisure establishments
Sportcomplex Heist-op-den-Berg NV	Not consolidated (full consolidation)			x		Immaterial - rental of leisure establishments
Traject NV	Not consolidated (full consolidation)			x		Immaterial - mobility
VAB Banden Peeters NV	Not consolidated (full consolidation)			x		Immaterial - vehicles
Lubaco BVBA	Not consolidated (full consolidation)			x		Immaterial - vehicles
VAB Fleet Services NV	Not consolidated (full consolidation)			x		Immaterial - vehicles
VAB Rijsschool NV	Not consolidated (full consolidation)			x		Immaterial - driving school
24+ NV	Not consolidated (full consolidation)			x		Immaterial - customer care centre

NLB Vita d.d.	Equity method				x	life Insurance
Macadam VAB Inspection NV	Not consolidated (Equity method)			x		Immaterial - other technical tests and inspections
AIA-Pool cvba	Not consolidated (Equity method)			x		Immaterial - insurance broker
AssurCard NV	Not consolidated (Equity method)			x		Immaterial - computerised third-party payment system
Optimobil Belgium NV	Not consolidated (Equity method)			x		Immaterial - vehicles
KBC Group NV	Full consolidation	x				bank-insurance holding
Experience@work CVBA	Not consolidated (Equity method)			x		Immaterial - business & other management consulting activities

*Table 116 - EU LI3\_Outline of the differences in the scope of consolidation (entity by entity)*

## Annex IX

### Countercyclical buffers

Geographical distribution of relevant credit exposures												
	General credit exposure		Trading book exposure		Securitisation exposure		Own funds requirements				Own funds requirement weights	Countercyclical capital buffer rate
	Exposure value for SA	Exposure value for IRB	Sum of long and short position of trading book	Value of trading book exposure for internal models	Exposure value for SA	Exposure value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	Total		
31 December 2019 (EUR million)												
Belgium	1 386	104 906	-	-	-	-	2 519	-	-	2 519	49.06%	0.00%
Czech Republic	393	31 201	-	-	-	-	780	-	-	780	15.20%	1.50%
Ireland	73	10 307	-	-	-	-	340	-	-	340	6.63%	1.00%
Hungary	367	5 916	-	-	-	-	325	-	-	325	6.33%	0.00%
Slovak Republic	1 801	7 099	-	-	-	-	309	-	-	309	6.03%	1.50%
Republic of Bulgaria	3 363	27	-	-	-	-	200	-	-	200	3.90%	0.50%
France	225	2 072	-	-	-	240	134	-	3	136	2.66%	0.25%
Netherlands	11	2 680	-	-	-	93	123	-	1	123	2.40%	0.00%
Luxembourg	268	1 497	-	-	-	-	92	-	-	92	1.79%	0.00%
United States of America	22	2 019	-	-	-	112	64	-	1	65	1.27%	0.00%
United Kingdom	8	1 244	-	-	-	1	62	-	0	62	1.21%	1.00%
Germany	7	1 005	-	-	-	-	40	-	-	40	0.79%	0.00%
Hong Kong	0	328	-	-	-	-	15	-	-	15	0.28%	2.00%
Sweden	0	46	-	-	-	-	2	-	-	2	0.04%	2.50%
Denmark	-	6	-	-	-	-	0	-	-	0	0.00%	1.00%
Norway	0	2	-	-	-	-	0	-	-	0	0.00%	2.50%
Republic of Lithuania	-	1	-	-	-	-	0	-	-	0	0.00%	1.00%
Iceland	-	1	-	-	-	-	0	-	-	0	0.00%	1.75%
Other countries	82	3 003	-	-	-	396	121	-	3	124	2.42%	0.00%
<b>Total</b>	<b>8 006</b>	<b>173 362</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>842</b>	<b>5 127</b>	<b>-</b>	<b>7</b>	<b>5 134</b>	<b>100.00%</b>	<b>0.43%</b>

Countercyclical capital buffer is calculated only for the relevant credit exposure classes as defined in Article 140(4) of the Capital Requirement Directive. Exposure classes not included in the calculation are exposures to a) central governments or central banks; b) regional governments or local authorities; c) public sector entities; d) multilateral development banks; e) international organisations; f) institutions.

Table 117 - Geographical distribution of relevant credit exposures

**Amount of institution-specific countercyclical capital buffer****31 December 2019 (in millions of EUR)**

Total risk exposure amount	99 071
Institution-specific countercyclical buffer rate	0.43%
Institution-specific countercyclical buffer requirement	426

[Table 118 - Amount of institution-specific countercyclical capital buffer](#)

# Annex X

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# Glossary

## 3 LOD (Three Lines of Defence)

The 3 LOD model ensures the resilience of KBC's risk and control environment and safeguards the sustainability of our business model going forward. In this model, Business acts as the first line of defence, Risk as one of the second lines and Internal Audit as the third line. They all work together in order to prevent big impact losses for the KBC group.

## Add-On

Basel-II-defined factor to reflect the potential future increase in exposure stemming from derivatives transactions.

## ALM (Asset and Liability Management)

The ongoing process of formulating, implementing, monitoring and revising strategies for both on-balance-sheet and off-balance-sheet items, in order to achieve an organisation's financial objectives, given the organisation's risk tolerance and other constraints.

## Asset class

A classification of credit exposures according to the Capital Requirements Directive – IRB approach. The main classes are Sovereigns, Institutions, Corporates, SME Corporates and Retail. Classification depends on the type of obligor, the total annual sales of the obligor, the type of product and the exposure value.

## Banking book

KBC's banking book is defined as all positions in the KBC Bank group that are not in the trading book.

A trading book consists of positions in financial instruments and commodities held either with trading intent or in order to hedge other elements of the trading book. To be eligible for trading book capital treatment, financial instruments must either be free of any covenants restricting their tradability or be able to be hedged completely. In addition, positions should be frequently and accurately valued, and the portfolio actively managed.

## Basel III

Basel III is a global regulatory standard on bank capital adequacy, stress testing and market liquidity risk agreed upon by the members of the Basel Committee on Banking Supervision in 2010. Basel III was developed in response to the deficiencies in financial regulation revealed by the late-2000s financial crisis.

## BPV (Basis Point Value)

The measure that reflects the change in the net present value of interest rate positions, due to an upward parallel shift of 10 basis points (i.e. 0.10%) in the zero coupon curve.

### **Business risk**

Business risk is the risk arising from changes in external factors (the macroeconomic environment, regulations, client behaviour, competitive landscape, socio-demographic environment, etc.) that impact the demand for and/or profitability of our products and services. Strategic risk is the risk caused by not taking a strategic decision, by taking a strategic decision that does not have the intended effect or by not adequately implementing strategic decisions.

### **CAD ratio**

Total eligible capital / Risk-weighted assets (the result must be at least 8% according to the Basel regulations).

### **Counterparty risk**

The risk related to the non-payment or non-performance by a counterparty in a professional transaction (excluding money market placements – which can be considered as borrower risk), due to that party's insolvency or lack of willingness to pay or perform.

### **CRD (Capital Requirements Directive)**

European-Union-specific interpretation of the general Basel II regulations. The CRD is in turn transposed into the national legislation and regulations of the EU Member States.

### **Credit risk**

The risk related to non-payment or non-performance by a contractual party (for instance, a borrower, guarantor, insurer or re-insurer, counterparty in a professional transaction or issuer of a debt instrument), due to that party's insolvency or lack of willingness to pay or perform, or to events or measures taken by the political or monetary authorities of a particular country (the latter is also referred to as country risk).

### **Cure rate**

Rate of clients who default and revert subsequently to 'non-defaulted' status.

### **Default**

A client/facility is considered to be in default if – and only if – one or more of the following conditions are fulfilled: the client/facility is 'unlikely to pay' and/or the client/facility is '>90 dpd default', and/or the client/ facility is 'irrecoverable'.

KBC's definition of default builds on the definition set out in the Basel II Capital Requirements Regulation (CRR). Based on the EBA paper on Forbearance and Non-performing exposures, KBC's definition of default is also fully aligned with the EBA's definition of non-performing (PD 10-11-12), i.e. they should be regarded as synonymous. The same holds true for the definition of 'impaired financial instrument' according to International Financial Reporting Standards (IFRS).

### **Downturn LGD**

LGD in an economic downturn. The underlying idea in the Basel regulation is that LGD is correlated to PD and loss rates will be higher in a year with many defaults.

### **DPF (Discretionary Participation Feature)**

Part of the annual profit that is attributed to the policyholders of an insurance contract.

### **EAD (Exposure At Default)**

The amount expected to be outstanding if an obligor defaults. At the time of default, it is equal to the actual amount outstanding, and therefore is no longer an expectation.

### **EBA (European Banking Authority)**

The successor to the CEBS (Committee of European Banking Supervisors).

A committee comprised of high level representatives from the banking supervisory authorities and central banks of the European Union. It gives advice to the European Commission on banking policy issues and promotes co-operation and convergence of supervisory practice across the European Union. The committee also fosters and reviews common implementation and consistent application of Community legislation.

### **EIOPA (European Insurance and Occupational Pensions Authority)**

The successor to the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS), EIOPA is part of the European System of Financial Supervision consisting of three European Supervisory Authorities and the European Systemic Risk Board. It is an independent advisory body to the European Parliament and the Council of the European Union. EIOPA's core responsibilities are to support the stability of the financial system, transparency of markets and financial products, as well as the protection of insurance policyholders, pension scheme members and beneficiaries.

### **EL (Expected Loss)**

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

### **Fair value**

The amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's length transaction. Market-consistent value or fair value is based on relative pricing or the 'no arbitrage' argument.

## Forbearance measures

Forbearance measures consist of concessions (the loan's terms/conditions are renegotiated) towards a borrower facing, or about to face, financial difficulties. Forbearance measures can be taken only if the borrower and the bank both agree to them. Forbearance measures are applied at facility level.

## Forborne loans

Forborne loans are exposures to debt contracts for which forbearance measures have been taken and for which the exit criteria are not fulfilled. The forbearance definitions apply to:

- all KBC group entities exposed to credit risk;
- all types of borrowers (individuals, SMEs, corporates, banks, authorities, etc.), including the natural and legal entities in the debtor's group that are included in the accounting scope of consolidation;
- the following types of loans/facilities: all debt instruments (loans and advances and debt securities) and off-balance-sheet exposures, apart from held-for-trading exposures. Off-balance-sheet exposures comprise the following revocable and irrevocable items: loan commitments given, financial guarantees given and other commitments given.

They do not apply to:

- full service car lease and derivatives exposure (i.e. non-money market professional transactions).

## FSMA (Financial Services and Markets Authority)

The FSMA is the successor to the former Banking, Financial and Insurance Commission (CBFA). It 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.

## GMRA (General Master Repurchase Agreement)

Standardised contract used when entering into (reverse) repo-like transactions.

## Haircuts

The difference between the market value of a security and its collateral value. Haircuts are taken in order to account for a possible decline in the market value of a collateralising security upon liquidation.

## HVaR (Historical Value at Risk)

Historical Value at Risk estimates the maximum amount of money that can be lost on a given portfolio due to adverse market movements over a defined holding period, with a given confidence level and using real historical market performance data.

### **IBNR (Incurred but not Reported) impairments**

IBNR impairments are impairment losses recognised on unimpaired loans and advances, as well as on unimpaired debt securities in a Loans & Receivables book, Available-for-Sale (AFS) book or Held-to-Maturity (HTM) book.

They are estimated on a portfolio basis using a model-based (statistical) method. Loans and advances, as well as debt securities in a Loans & Receivables book, Available-for-Sale (AFS) book or Held-to-Maturity (HTM) book, are grouped together based on a default expectation rating that takes several indicators of impairment into account. IBNR impairments are an estimate of the specific provisions to be booked for a credit event (also known as the 'impairment trigger') that has already occurred, but is still unknown, and will only emerge at a later date.

### **ICAAP (Internal Capital Adequacy Assessment Process)**

The internal process a bank should have in place for assessing its overall capital adequacy in relation to its risk profile, as well as its strategy for maintaining adequate capital levels in the future.

### **Impairment on financial assets**

A financial asset or a group of financial assets is impaired and impairment losses are incurred if, and only if, there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) has an impact on the estimated future cashflows of the financial asset or group of financial assets that can be reliably estimated. If any such evidence exists, the entity applies the appropriate impairment methodology to the financial asset concerned.

Losses expected as a result of future events, no matter how likely, are not recognised.

### **Impaired Loans Ratio**

This portfolio risk ratio indicates the proportion of impaired loans in the loan portfolio. The numerator is the impaired part of the loan portfolio and the denominator of the loan portfolio. Both the numerator and denominator are measured by gross carrying amount, while the ratio is expressed as a percentage.

### **Interest rate risk**

The potential negative deviation from the expected value of a financial instrument or portfolio thereof due to changes in the level or in the volatility of interest rates.

### **IRB (Internal Ratings-Based)**

An approach defined in the Capital Requirements Directive to calculate the credit-risk-related capital requirements, where a financial institution uses its own models to perform the calculation. There are two possibilities: the IRB Foundation or the IRB Advanced approach. When applying the IRB Foundation approach, internal estimates of the Probability of Default are used to calculate minimum requirements, while the IRB Advanced method also takes into account the internal estimates of Exposure At Default and Loss Given Default.



### ISDA Master Agreements

Standardised contracts developed by the International Swaps and Derivatives Association and used to document bilateral professional transactions. The presence of such contracts also allows professional exposures between the contracting parties to be netted.

### Lapse risk

The potential negative deviation from the expected value of an insurance contract or a portfolio thereof due to unexpected changes in policy lapses. Note that the term 'surrender risk' refers specifically to contracts with surrender value.

### LCR (Liquidity Coverage Ratio)

Stock of high-quality liquid assets divided by total net cash outflows over the next 30 calendar days. A result of 100% (or more) indicates that a bank maintains a sufficient stock of 'high-quality liquid assets' to cover net cash outflows for a 30-day period under a stress scenario. The parameters of the stress scenario are defined in the Commission Delegated Regulation (EU) 2015/61 of 10 October 2014. The LCR can also indicate whether a buffer or shortage exists by subtracting the total net cash outflows over the next 30 calendar days from the stock of high-quality liquid assets.

### Leverage ratio

The leverage ratio is a new supplementary non-risk-based measure to contain the build-up of leverage (i.e. a backstop as regards the degree to which a bank can leverage its capital base). It is calculated as a percentage of tier-1 capital relative to the total on- and off -balance-sheet exposure (non-risk-weighted).

### LGD (Loss Given Default)

The loss a bank expects to experience if an obligor defaults, taking into account the eligible collateral and guarantees provided for the exposure. It can be expressed as an amount or as a percentage of the EAD (Exposure At Default). At the time of default, the loss experienced is a loss of the actual amount outstanding, thus no longer an expectation.

### Liquidity risk

The risk that an organisation will be unable to meet its liabilities or obligations as they come due, without incurring higher-than-expected costs.

### Market risk

The risk related to changes in the level or in the volatility of market prices.

### Market value

The cost that would be incurred or the gain that would be realised if an outstanding contract was replaced at current market prices (also called replacement value).

### Mark-to-Market

The act of assigning a market value to an asset.

### MREL

The minimum requirement for own funds and eligible liabilities. It is set on a case-by-case basis by the SRB.

### MVA (Market Value Adjustment)

IFRS-inspired adjustments or reserves recognised on positions at fair value. MVAs cover close-out costs, adjustments for less liquid positions or markets, counterparty exposure resulting from OTC derivatives, model-linked valuation adjustments, operation-related costs, as well as transaction-specific adjustments.

### NBB (National Bank of Belgium)

One of the tasks of the NBB is financial supervision, which is the instrument for ensuring financial stability, and the second key function of a central bank, alongside monetary stability. Financial supervision covers the:

- prudential supervision of financial institutions from both the micro-prudential and macro-prudential angle, and the prompt detection of systemic risk;
- supervision of information, the functioning of the financial markets and respect for the appropriate code of conduct, together with consumer protection.

### NPL exposure

For Non-Performing Loans (NPL) exposure, KBC uses the Impaired Loans Ratio (please refer to this definition).

### Netting

An agreed offsetting of positions or obligations by trading partners or participants to an agreement. Netting reduces the number of individual positions or obligations subject to an agreement to a single obligation or position.

### NSFR (Net Stable Funding Ratio)

Available stable funding divided by required stable funding, with available stable funding derived from the different parts of the liabilities side of the balance sheet (required funding = assets side). Regulatory defined weightings to describe stability are assigned to the different parts (both assets and liabilities) based on the proposal by the European Commission for amending the CRR (i.e. Regulation (EU) No 575/2013). A ratio of 100% means that the funding situation is stable.

### Operational risk

The risk of inadequate or failed internal processes, people and systems or of sudden external events, whether man-made or natural, having a direct impact on our own operations. Operational risk excludes business, strategic and reputational risk.

### **ORSA (Own Risk and Solvency Assessment)**

The Own Risk and Solvency Assessment covers the entirety of the processes and procedures employed for identifying, assessing, monitoring, managing, and reporting on the short- and long-term risks a (re)insurance undertaking faces or may face, and for determining the own funds necessary to ensure that the undertaking's overall solvency needs are met at all times.

### **OTC (Over The Counter)**

An over-the-counter contract is a bilateral contract where two parties agree on how a particular trade or agreement is to be settled in the future. It is usually a direct contract between a bank (or an investment bank) and its clients. It contrasts with exchange trading.

### **Past due**

A financial contract is past due when a counterparty fails to make payment when contractually due.

In factoring, a purchased receivable is past due when the debtor of the invoice fails to make payment on the due date of an undisputed invoice.

### **PD (Probability of Default)**

The probability that an obligor will default within a one-year horizon.

### **PIT PD (Point-In-Time PD)**

PD reflecting the expected default rate in the next year, based on current economic conditions (contrast with Through-the-Cycle PD).

### **RAPM (Risk-Adjusted Performance Measurement)**

The risk-adjusted performance measurement policy defines a set of risk-adjusted performance metrics to be used for (i) allocating capital and (ii) setting variable remuneration.

### **RAROC**

A measure, expressed as a percentage, used to reflect the profitability of transactions and/or financial instruments, account taken of the risk involved in these transactions and/or financial instruments. Generally speaking, it equals the 'expected profits minus the expected losses' divided by the capital invested.

### **RBA (Ratings-Based Approach)**

Basel II approach for calculating the risk-weighted assets applied to securitisation exposures that are externally rated, or where a rating can be inferred.

## **Risk appetite**

Risk appetite, as defined by the Board of Directors, is the amount and type of risk that KBC is able and willing to accept in pursuit of its strategic objectives. While the ability to accept risk is limited by financial (e.g., available capital) and non-financial regulatory and legal constraints, the willingness to accept risk depends on the interests of various stakeholders (shareholders, creditors, employees, management, regulators, clients, etc.). Risk appetite aims to find the right balance of satisfaction for all stakeholders.

## **RMBS (Residential Mortgage-Backed Security)**

A type of structured credit product whose underlying assets are residential debt such as mortgages, home-equity loans and subprime mortgages.

## **RWA (Risk-Weighted Asset)**

An exposure weighted according to the 'riskiness' of the asset concerned. 'Riskiness' depends on factors such as the probability of default by the obligor, the amount of collateral or guarantees and the maturity of the exposure.

## **Solvency II**

Solvency II is a project, initiated by the European Commission in 2001, which establishes capital requirements and risk management standards that will apply across the EU and will affect all areas of an insurer's operations. Solvency II aims to move away from the idea that 'one approach fits all' and thus encourages companies to manage risk in a way which is appropriate to the size and nature of their business in order to provide protection to policyholders by reducing the risk of insolvency to insurers.

## **SRB (Single Resolution Board)**

The Single Resolution Board (SRB), which became operational on 1 January 2015 (fully responsible for resolution on 1 January 2016), is the resolution authority for significant banking groups and for any cross-border banking group established within participating member states. Resolution is the restructuring of a bank by a resolution authority through the use of resolution tools in order to safeguard public interests, including the continuity of the bank's critical functions and financial stability, at minimal costs to taxpayers.

## **SVaR (Stressed Value At Risk)**

Stressed Value At Risk is analogous to the Historical VaR, but it is calculated for the time series of a maximum stressed period in recent history.

## **(Core) Tier-1 ratio**

$[\text{tier-1 capital}] / [\text{total weighted risks}]$ . The calculation of the core tier-1 ratio does not include hybrid instruments (but does include the core-capital securities sold to the Belgian and Flemish governments).

### Technical insurance risk

The risk of loss due to (re)insurance liabilities or of adverse developments in the value of (re)insurance liabilities related to non-life, life and health (re)insurance contracts.

### TLTRO (Targeted Longer-Term Refinancing Operation)

The targeted longer-term refinancing operations (TLTROs) are Eurosystem operations that provide financing to credit institutions for periods of up to four years. They offer long-term funding at attractive conditions to banks in order to further ease private sector credit conditions and stimulate bank lending to the real economy. The TLTROs are targeted operations, as the amount that banks can borrow is linked to their loans to non-financial corporations and households. Moreover, in TLTRO II the interest rate to be applied is linked to the participating banks' lending patterns.

### Trading book

The trading book consists of positions in financial instruments and commodities held either with trading intent or in order to hedge other elements of the trading book. Positions held for trading intent are those held intentionally for resale in the short term and/or with the intent of benefiting from actual or expected price movements in the short term or to lock in arbitrage profits.

### TTC PD (Through-The-Cycle PD)

PD reflecting the one-year expected default rate averaged out over a longer period (contrast with Point-in-Time PD).

### VaR (Value At Risk)

The unexpected loss in the fair value (= difference between the expected and worst-case fair value), at a certain confidence level and with a certain time horizon.