Prudential regulation and supervision

A. Introduction

In early 2022, the waning of the COVID-19 pandemic and the economic recovery raised the hope that the Bank's normal prudential activities could resume. In late February 2022, however, Russia's invasion of Ukraine hindered a return to normality. This conflict generated a series of uncertainties and led to a further increase in inflation, especially energy inflation. At the same time, the growth outlook was sharply revised downwards. Central banks began to tighten their monetary policy to contain inflationary pressures, leading to an increase in market rates. These macroeconomic and macrofinancial developments had an impact on the agenda of prudential authorities, in Belgium and elsewhere.

Against this backdrop, macroprudential initiatives were taken at both national and European levels. The European Systemic Risk Board (ESRB), which is responsible for coordinating macroprudential policy at EU level, inter alia issued a warning[1] to highlight the increased probability of the materialisation of a number of serious risks to financial stability. At national level, the Bank, in its capacity as the macroprudential authority for Belgium[2], maintained a series of existing measures and decided not to impose new capital requirements on the banking sector, in order to encourage banks to offer solutions to households and non-financial corporations in difficulty. These initiatives are described in more detail in part B.

In addition to its macroprudential tasks, the Bank is responsible for the supervision of credit institutions (under the single supervisory mechanism (SSM)), stockbroking firms, insurance undertakings, financial market infrastructures and payment institutions. Changes in the regulatory and statutory framework specific to one or more of these sectors are described in part C. Adjustments to the regulatory and legal framework for banks and insurance undertakings mainly related to structural developments which had already begun or been announced. Furthermore, the Bank continues to devote increasing attention and resources to monitoring compliance with the provisions on the prevention of money laundering and terrorist financing and to climate-related risks, for all sectors under its supervision.

The operational aspects of the supervision of financial institutions in 2022 are presented in part D. The Bank's work, including inspections, covered both recent economic and financial developments and more structural issues.

Regulatory and prudential supervision aspects specifically related to the digitalisation of financial services are discussed in part E. The digitalisation of financial services creates both opportunities and risks for the financial sector. The work carried out by the Bank in this area covered the financial sector's preparation for the shift to digitalisation, the prudential treatment of certain assets and the sector's operational resilience, including in relation to cyber risks.

Finally, the Bank is also the national resolution authority for Belgium. The Bank's actions in this capacity are discussed in detail in part F. This part covers in particular recent legislative developments (for both banks and insurance undertakings), expectations of resolution authorities with regard to resolvability and the establishment of resolution financing arrangements.

1 Warning of the ESRB of 22 September 2022 on vulnerabilities in the Union financial system (ESRB/2022/7).

2 Act of 25 April 2014 establishing the mechanisms for a macroprudential policy and setting out the specific tasks of the National Bank of Belgium in connection with its mission of contributing to the stability of the financial system.

B. Macroprudential policy

As the macroprudential authority for Belgium, the Bank keeps a close watch on developments in the financial sector, with a particular focus on the detection of risks that could threaten the stability of the sector. Where such systemic risks arise, the Bank is authorised to take the necessary macroprudential measures to avoid a further accumulation of such risks and to help reduce the financial sector's vulnerabilities and exposures. These macroprudential measures can take various forms, e.g. additional capital requirements imposed in view of financial-cycle developments, specific financial sector exposures or the systemic nature of certain institutions and measures aimed at framing financial institutions' credit policies. The Bank's key decisions are briefly outlined below. The Bank's annual Macroprudential Report presents the macroprudential framework in more detail.

1. Countercyclical capital buffer

The countercyclical capital buffer was maintained at 0 % to give banks full flexibility to support the real economy. In its capacity as the country's macroprudential authority, the Bank decided in March 2020 – at the beginning of the COVID-19 pandemic – to release the countercyclical capital buffer which, at the time, stood at around € 1 billion for the Belgian banking sector as a whole. This buffer is built up during periods of dynamic lending to ensure banks have sufficient margins when economic conditions deteriorate. This relaxation of the regulatory requirements allowed banks to continue lending and support businesses and households.

At the start of 2022, the need for such support was significantly less as the economic recovery gathered pace and asset quality indicators further improved. At that time, credit growth indicators showed renewed dynamism that was comparable to the situation in 2019 when the activation of the countercyclical capital buffer was first announced in Belgium. Before Russia's invasion of Ukraine in late February 2022, macrofinancial conditions seemed to suggest the need to consider reactivation of the countercyclical capital buffer.

However, from that point onwards, soaring energy and commodity prices, rising interest rates and high volatility in the financial markets created substantial uncertainty as to macrofinancial developments. With an eye to the most appropriate macroprudential policy stance, the Bank decided, as a first step, to monitor and analyse the impact of these factors on, amongst other things, the level of cyclical risks and the probability of tail-risk scenarios for financial stability.

In late September 2022, when the Bank noted a significant deterioration in the macroeconomic environment and a downward revision of growth expectations, it decided to maintain the countercyclical buffer rate at 0 %, to ensure that Belgian banks had full flexibility to use their ample available capital reserves to support the real economy. The Bank counts on Belgian banks to help, where necessary, Belgian households and non-financial corporations cope with the challenges posed by record-high energy prices and challenging macroeconomic conditions. This support should take the form of ensuring the continuation of an adequate flow of credit to the real economy as well as proactively offering moratoria and other debt rescheduling options to borrowers experiencing temporary or more structural repayment problems due to high energy bills and rising living or operating expenses.

In this context, the Bank welcomed Belgian banks' unilateral commitment to offer, as from 1 October, moratoria to mortgage borrowers significantly affected

by the energy crisis and, more generally, case-by-case solutions to households and non-financial corporations heavily affected by the deteriorating macroeconomic environment (see chapter 5 in the "Economic and financial developments" section of this report).

The Bank also urged financial institutions to remain cautious in their decisions regarding dividends and other types of profit distributions and to base these decisions on a conservative, forward-looking assessment of their capital and provisioning needs in light of possible macroeconomic scenarios.

2. Housing market

The Bank continues to closely monitor risks associated with the housing market and to maintain existing measures. As part of its macroprudential mandate, the Bank has been closely monitoring developments in the Belgian housing market for many years. Since 2013, it has required the Belgian banking sector to maintain a specific macroprudential capital buffer for real estate risks, due to its high exposure on this market in the form of mortgage loans. This measure has been extended and adapted repeatedly. In late 2021, when the Bank was considering extending this requirement beyond April 2022, it deemed the risk associated with mortgage loan portfolios in Belgium to be broadly stable. It therefore decided to maintain the capital buffer at the same level, i.e. around € 2 billion for the banking sector as a whole. Since May 2022, this buffer has taken the form of a sectoral systemic risk buffer (SSyRB). This tool, which is harmonised at EU level and was introduced by CRD V, replaced the instrument previously applied under Article 458 of the CRR. As it has indicated in the past, the Bank stands ready to release this macroprudential capital buffer, for example in the event of a substantial increase in repayment problems for mortgage borrowers.

In addition to this capital buffer, the Bank also introduced prudential expectations for mortgage lenders in early 2020. These recommendations – which have been maintained – aim to improve the average credit quality of new mortgage loans. They have achieved their twofold objective of reducing the share of the riskiest loans in new mortgage origination in Belgium while maintaining access to the mortgage market for creditworthy borrowers, including young people. This reflects in particular the fact that these

recommendations provide sufficient leeway to lenders, especially when it comes to granting loans with a high loan-to-value ratio to first-time buyers.

Still on the subject of the real estate exposures of Belgian financial institutions, in late 2020, based on financial stability considerations, the Bank published a macroprudential circular setting out its expectations and reporting requirements with regard to the inclusion of the energy efficiency of real estate exposures in the management of climate-related risks by the financial sector (see section C.3.2).

3. Systemically important institutions

The capital surcharge imposed on domestic systemically important banks was maintained. As a macroprudential authority, the Bank imposes specific capital requirements on domestic systemically important institutions to enhance their resilience, given the high economic and social costs their failure would entail. The applicable capital surcharge depends on the systemic importance of the bank. It amounts to 1.5 % of risk-weighted assets for the four largest institutions and 0.75 % for the remaining four banks. These buffers are relatively substantial: by the end of 2021, they totalled more than € 5 billion. Following the acquisition of AXA Bank Belgium by Crelan at the end of 2021, the Bank adapted the list of systemically important banks to include Crelan, which has been subject to a capital surcharge of 0.75 % of its risk-weighted assets since 1 January 2023.

C. Regulatory and statutory framework

1. Banks

1.1 Activities of the Basel Committee on Banking Supervision

In recent years, the Basel Committee on Banking Supervision (BCBS) has focused more on implementing and assessing its global prudential standards for banks and less on developing new regulations. Following completion of the so-called Basel III standards adopted in response to the 2008 financial crisis, a "regulatory hard stop" or sabbatical was introduced. The Committee has since turned its attention to new developments affecting the financial system in general and the banking sector in particular.

One such development is the emergence of crypto-assets and related banking services. Following a second industry consultation, the Committee continued its work on the prudential regulatory treatment of banks' exposures to crypto-assets. The intention remains to adopt a conservative approach. This is discussed in more detail in part E. More broadly, the Committee paid close attention to the impact of digitalisation on banks' activities and supervision.

Recent crises affecting several non-bank financial institutions (including Archegos) revealed vulnerabilities and shortcomings in the way banks manage the risks associated with their relationships and the interaction with such institutions. It was found that the risks associated with exposure to derivatives transactions with these financial actors, amongst others, had been underestimated and that concentration limits had been set too high. Following an assessment, the BCBS issued a newsletter[1] with recommendations on interaction between banks and non-bank financial institutions.

The Committee also examined the impact of the partial completion of the European banking union on the systemic importance of European banks engaged in extensive cross-border activities in the euro area, amongst others. In this context, the supervisors concerned were given discretionary powers allowing them to consider such transactions within the euro area as possibly less risky for the purpose of calculating the capital buffer for global systemically important banks (GSIBs). The Bank took a somewhat critical stance in these discussions, as this decision could lead to a reduction in the capital buffers of systemically important banks.

Climate risks also remained a priority for the Committee. Work on the subject covered both the first pillar of prudential regulation for banks, which includes the capital requirements applicable to all banks, and the second pillar of such regulation, which entails assessment of the quality of risk management by banks based on their individual risk profile. In this context, the Committee published, on the one hand, answers to frequently asked questions on the inclusion of climate-related risks in pillar 1 requirements and, on the other hand, guidance on the effective management and oversight of climate-related financial risks by banks. Section C.3.2 of this report describes the Basel Committee's climate-related activities in more detail.

In addition, the functioning of the Basel framework for prudential standards and requirements adopted in the context of COVID-19 and beyond was assessed. Although not all aspects of the Basel III framework have been implemented, a thorough review of the implications of these regulations has already been carried out. It revealed a significant positive

1 BCBS, Newsletter on bank exposures to non-bank financial intermediaries, 23 November 2022.

effect on the robustness of banks and scant evidence of undesirable consequences, particularly in terms of their lending capacity. The possibility to use capital and liquidity buffers and the pro-cyclicality of the framework were also studied. Given the current geopolitical context, the Committee continues to stress the importance of further strengthening banks' reserves gradually so as to cushion the impact of internal and external shocks, including those unrelated to the credit cycle.[1]

1.2 Developments at European level

Continued negotiations on the banking package

The Bank's previous annual report provided an overview of the various parts of the banking package launched by the European Commission at the end of October 2021, which amends the European regulations applicable to banks.[2] The package consists of a directive modifying the Capital Requirements Directive (CRD6) and two regulations, specifically an update to the Capital Requirements Regulation (CRR3) and a regulation on resolution-related subjects (see also part F of this report).

These amendments aim, on the one hand, to transpose the latest parts of the Basel III standards into European regulations and, on the other hand, to strengthen and harmonise the arsenal of supervisory tools and practices. They concern in particular the regulations applicable to branches of banks from third countries, the powers of supervisory authorities to impose sanctions, the "fit and proper" requirements applicable to directors and key function holders at institutions, and further development of the rules on the management and monitoring of environmental, social and governance (ESG) risks.

Negotiations on the banking package continued in 2022, within both the Council and the European Parliament. The Economic and Financial Affairs (ECOFIN) Council published its final position on the package in early November. Like the European Central Bank (ECB) and the European Banking Authority (EBA), the Bank has always advocated for consistent and timely implementation of the Basel III standards and regrets that the banking package continues to derogate significantly from these international standards, thereby making the rules applicable to European banks less stringent. It believes that it is in the best interest of European supervisors and regulators, as well as the banking industry, to maintain their reputation in this context. The Bank will continue to follow closely negotiations between the European Parliament, the Council and the European Commission on this regulatory package.

Completion of the banking union

Negotiations on the completion of the banking union resumed in the first half of 2022. Specifically, it was discussed whether additional steps could be taken to establish the as yet non-existent third pillar of the banking union, namely a common European deposit insurance scheme. The European Deposit Insurance Scheme (EDIS) would complement the already established first and second pillars of the banking union (i.e. the Single Supervisory Mechanism and the Single Resolution Mechanism, respectively). The prudential treatment of the risks associated with banks' sovereign exposures, the possibility of reducing local capital and liquidity buffers for subsidiaries of cross-border European banking groups, and certain adjustments to improve crisis management at the level of European banks by European authorities were also considered. As no consensus could be reached on common progress in all these areas, only the last point could form the object of an agreement. The European Commission was requested to formulate a proposal to improve the existing crisis management framework, in particular for small and medium-sized credit institutions (see also part F of this report).

1.3 Developments at national level

Developments regarding governance

Update of the governance manual

The Bank updated its governance manual for the banking sector. In recent years, governance has formed the object of several regulatory developments at the Belgian and international levels: the new Companies and Associations Code entered into force in Belgium, the EBA issued new guidelines on internal governance,[3] fit and proper assessments[4] and

1 BCBS, Newsletter on positive cycle-neutral countercyclical capital buffer rates, 5 October 2022.
2 See the Bank's 2021 annual report, section II.B.1.3.
3 EBA Guidelines of 2 July 2021 on internal governance (EBA/GL/2021/05).
4 EBA Guidelines of 2 July 2021 on the assessment of the suitability of members of the management body and key function holders (EBA/GL/2021/06).

executive remuneration,[1] the Bank published new rules on external functions, etc.

In view of these regulatory developments, the Bank updated its governance manual for the banking sector via its communication of 11 October 2022.[2] The manual contains all regulatory texts on governance applicable at both national and international levels.

The updated manual highlights several new aspects. For example, diversity – as defined in the EBA guidelines[3] – must now be taken into account in the composition of credit institutions' management bodies and staff. The manual also includes new prudential requirements on risk management (including climate and environmental risks), risk culture, conflicts of interest and ICT security (including the appointment of a chief information security officer). Furthermore, it clarifies how to reconcile the new anti-money laundering and counter-terrorist financing rules with the general rules on governance. Finally, the manual includes a new chapter on governance requirements for financial groups, which covers, amongst other things, the management of intra-group conflicts of interest.

Transposition of the EBA guidelines on remuneration policy

The Bank published a new circular on remuneration policy. The changes to the European remuneration policy framework introduced by CRD V were transposed into law in July 2021. On 2 July 2021, the EBA also published new guidelines on remuneration policy[4] which replaced its previous guidelines issued in 2015. These new guidelines, which entered into force on 31 December 2021, were transposed into a new Bank circular on remuneration policy, namely circular NBB_2021_30,[5] which replaced circular NBB_2016_44 on the same subject.

1 EBA Guidelines of 2 July 2021 on sound remuneration policies under Directive 2013/36/EU (EBA/GL/2021/04).
2 Communication NBB_2022_23 of 11 October 2022 on the new governance manual for the banking sector.
3 The EBA Guidelines of 2 July 2021 on internal governance (EBA/GL/2021/05) list five diversity characteristics to be taken into account in the composition of management bodies: age, gender, geographical origin, educational background and professional background.
4 EBA Guidelines of 2 July 2021 on sound remuneration policies under Directive 2013/36/EU (EBA/GL/2021/04).
5 Circular NBB_2021_30 entitled "Remuneration policy: update of the statutory framework and transposition of the EBA Guidelines of 2 July 2021 on sound remuneration policies under Directive 2013/36/EU (EBA/GL/2021/04)".

The new circular clarifies the changes made to the statutory framework relating to remuneration policy and addresses a number of points for attention that emerged from day-to-day supervisory practice and the horizontal analyses carried out by the Bank and the EBA of current practices within banks.

First, the circular once again draws attention to the responsibility of institutions with regard to remuneration policy. The Belgian prudential remuneration rules go beyond the general provisions in the field of labour law and company law in several respects. However, the Bank found that some institutions have not yet sufficiently integrated the priority of these stricter remuneration rules into their remuneration policy. It is the responsibility of institutions to comply with both the letter and the spirt of these specific rules.

The circular also provides further explanation on the new proportionality regime,[6] which replaces the previous regime under which employees could benefit from certain exemptions if their variable remuneration was less than or equal to € 75 000.

Moreover, the circular clarifies the application of the rules in a group context. Thus, the remuneration rules must be complied with on a consolidated or sub-consolidated basis. Foreign subsidiaries falling within the regulatory scope of consolidation must therefore comply with the Belgian rules on remuneration policy if the professional activities of their employees have a significant impact on the group's risk profile. However, in accordance with the Banking Act,[7] such subsidiaries are exempt from the remuneration requirements applicable on a consolidated basis if they are subject to such requirements based on rules specific to their sector. In this way, a priority rule was introduced, along with a prohibition on circumvention. Banking and bancassurance groups are therefore required to develop an appropriate and consistent remuneration policy at group level.

In accordance with the EBA guidelines and Annex II to the Banking Act,[8] the circular also deals with the regime applicable to severance and termination payments, as well as the related exceptional regime. The Bank's three-year horizontal analysis indeed

6 See Article 9(1) of Annex II to the Banking Act.
7 See new Article 168(1) §1 of the Banking Act.
8 See Articles 12 and 12(1) of Annex II to the Banking Act.

showed that some institutions apply the latter improperly. The circular stresses the exceptional nature of this regime and urges institutions that make use of it to do so in accordance with the spirit of the text.

Finally, the circular draws attention to the amendment of Article 67 of the Banking Act, which now explicitly states that remuneration policies must be gender neutral. This means that institutions must base their remuneration policies on the principle of equal pay for equal or equivalent work.

Furthermore, remuneration reporting was also updated. On 17 November 2022, the Bank issued two circulars[1] which transpose and implement three sets of EBA guidelines on quantitative reporting requirements regarding remuneration.[2] The main new features are, on the one hand, the extension to investment firms of the reporting requirements which consist of making a comparative analysis of remuneration practices (so-called "benchmarking reporting") and providing additional information on individuals receiving total remuneration of more than one million euros (so-called "high-earners reporting") and, on the other hand, expansion of the information expected from credit institutions to include aspects relating to the gender pay gap. These new reporting requirements entered into force with immediate effect.

Prudential expectations concerning EU regulations on derivatives and securities financing transactions

Following the global financial crisis of 2008, the European Union sought to make the market for derivatives and the market for securities financing transactions more transparent, by adopting the European Market Infrastructure Regulation (EMIR) and the Securities Financing Transactions Regulation (SFTR), respectively. One of the main requirements of these two regulations is the obligation to report on a daily basis the details of each derivative and securities financing transaction to trade repositories authorised by the European Securities and Markets Authority (ESMA). The requirements set out in these two regulations apply to any European counterparty that enters into a derivative or securities financing contract, i.e. both financial institutions (banks, insurance undertakings, stockbroking firms, etc.) and non-financial institutions (small, medium or large companies, payment institutions, etc.). In addition, the reporting requirement applies to both extra-group and intra-group transactions, regardless of the settlement currency or the trading venue in which they are executed.

The Bank clarified these requirements in 2022. Although the EMIR reporting requirements have been in place since 2014 and the quality of the reported data has improved significantly thanks to various amendments introduced to the reporting standards, the Bank has repeatedly observed that significant deficiencies still exist in reporting by a number of Belgian banks. Therefore, the Bank communicated its supervisory expectations in terms of reporting to the largest banks during the year under review.

The Bank has developed an automated process in order to collect and analyse information on the derivatives and securities financing transactions reported by the entities it supervises. This allows the Bank to effectively use the data reported in order to monitor both micro- and macroprudential risks emerging in these two markets as well as compliance with EMIR and SFTR requirements by the entities under its supervision. The Bank also uses additional tools to monitor compliance with qualitative requirements.

Under EMIR, the Bank has granted several exemptions in recent years from the central clearing requirement for intra-group derivatives contracts and from the requirement to apply risk mitigation techniques for non-centrally cleared derivatives.[3] As a national competent authority,[4] the Bank considers that entities that have been granted such exemptions should

1 Circular NBB_2022_28 of 17 November 2022 transposing the EBA Guidelines of 30 June 2022 on the remuneration and gender pay gap benchmarking exercise under the CRD and IFD (EBA/GL/2022/06 into EBA/GL/2022/07) and Circular NBB_2022_29 of 17 November 2022 transposing the EBA Guidelines of 30 June 2022 on data collection exercises regarding high earners under the CRD and the IFD (EBA/GL/2022/08).

2 Guidelines of 30 June 2022 on remuneration, gender pay gap and approved higher ratio benchmarking exercises under Directive 2013/36/EU (EBA/GL/2022/06); Guidelines of 30 June 2022 on the benchmarking exercises on remuneration practices and the gender pay gap under Directive (EU) 2019/2034 (EBA/GL/2022/07); and Guidelines of 30 June 2022 on data collection exercises regarding high earners under Directive 2013/36/EU and Directive (EU) 2019/2034 (EBA/GL/2022/08).

3 The exemptions granted by the Bank from the obligation to apply risk mitigation techniques to non-centrally cleared derivatives are limited to the exchange of initial margins. This means that Belgian counterparties entering into non-centrally cleared OTC derivative contracts are still required to exchange variation margins.

4 In Belgium, the Bank and the FSMA are responsible for ensuring compliance with both regulations by the entities subject to their respective supervision.

continue to assess and monitor closely the risks arising from their derivatives positions. Against this background, and in order to enhance its monitoring capabilities with respect to EMIR and SFTR requirements, the Bank drew the attention of the larger Belgian counterparties to its supervisory expectations regarding the procedures that are essential in order to ensure compliance with both regulations. Finally, the Bank has asked the accredited auditors to issue a report in 2023 on the degree of compliance by the banks concerned with the requirements set forth in EMIR and SFTR.

New statutory framework for stockbroking firms

The new law on the supervision of stockbroking firms[1] and the amended FSMA Act[2] completed the transposition of the Investment Firms Directive (IFD).[3,4,5] A new prudential framework designed specifically for investment firms has thus been established, complemented by the Investment Firms Regulation (IFR),[6] on the one hand, and the Markets in Financial Instruments Directive and Regulation (MiFID and MiFIR),[7,8] on the other.

1 Act of 20 July 2022 on the legal status and supervision of stockbroking firms and containing miscellaneous provisions.
2 Act of 20 July 2022 amending the Act of 25 October 2016 on access to the activity of investment services and on the legal status and supervision of portfolio management and investment advisory firms and laying down other miscellaneous provisions to transpose Directive (EU) 2019/2034 of the European Parliament and of the Council of 27 November 2019 on the prudential supervision of investment firms.
3 Directive (EU) 2019/2034 of the European Parliament and of the Council of 27 November 2019 on the prudential supervision of investment firms and amending Directives 2002/87/EC, 2009/65/EC, 2011/61/EU, 2013/36/EU, 2014/59/EU and 2014/65/EU.
4 See section II.B.1.4 of the Bank's 2021 annual report.
5 It should be recalled that, under Belgian law, the term "investment firm" includes both stockbroking firms, which are supervised by the National Bank of Belgium, and portfolio management and investment advisory firms, which are supervised by the Financial Services and Markets Authority (FSMA). On this aspect, see section II.C.3.2 of the Bank's 2016 annual report.
6 Regulation (EU) No 2019/2033 of the European Parliament and of the Council of 27 November 2019 on the prudential requirements of investment firms and amending Regulations (EU) No 1093/2010, (EU) No 575/2013, (EU) No 600/2014 and (EU) No 806/2014.
7 Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU.
8 Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012.

1) A new prudential framework designed specifically for investment firms

Prior to this reform, the prudential framework for credit institutions was to a large extent also applicable to investment firms which, under Belgian law, are authorised as stockbroking firms.

In 2019, the European legislature expressed its wish to establish a specific prudential framework for investment firms, to better take into account the particular nature of the risks faced by such firms and the risks they themselves may pose, in particular to global financial stability. Thus, the IFR now distinguishes between different classes of investment firms depending on the nature of their activities and the value of their assets. Each class is subject to appropriate and proportionate prudential requirements.

a) Class 1

Class 1 comprises investment firms that fall under the new definition of a credit institution.[1] These firms must be authorised as credit institutions. They are no longer considered stockbroking firms and are subject only to the prudential requirements applicable to banks.

b) Classes 1A and 1B

Class 1A includes investment firms that remain stockbroking firms, the total value of whose consolidated assets is equal to or in excess of € 15 billion or, under certain conditions (in particular if the competent authority deems it justified), € 5 billion. Class 1B includes stockbroking firms that are subsidiaries included in the supervision, on a consolidated basis, of a banking group, provided the supervisory authority is satisfied that application of the CRR[2] own funds requirements is prudentially sound. The investment firms concerned are subject to the CRR and most provisions of the CRD.[3]

c) Class 2

Class 2 comprises investment firms authorised as stockbroking firms or portfolio management and investment advisory firms, excluding investment firms belonging to classes 1, 1A, 1B and 3. Firms in this class that are authorised as stockbroking firms are subject to the law on the supervision of stockbroking firms (see point 2 below) and the IFR.[4]

d) Class 3

Class 3 consists of “small and non-interconnected investment firms” which are subject to less stringent prudential requirements. This class, introduced by the IFR, excludes firms that hold customer funds, safeguard and administer customer assets and/or deal on their own account. It includes only investment firms authorised as portfolio management and investment advisory firms subject to the FSMA Act and the IFR.

2) Main new features of the Act of 20 July 2022 on the supervision of stockbroking firms

Following the adoption of the new European framework governing investment firms, the Belgian legislature decided to remove stockbroking firms from the scope of application of the Banking Act and to adopt a new law on the legal status and supervision of stockbroking firms, transposing the provisions of the IFD applicable to stockbroking firms. The introduction of a law specific to stockbroking firms, in addition to the Banking Act, thus reflects the coexistence of two different prudential frameworks at European level.

Overall, the IFD was faithfully transposed, while ensuring as much continuity as possible with the framework applicable to stockbroking firms before the new European framework entered into force.

The new law singles out “large stockbroking firms”, which form part of the aforementioned classes 1A and 1B,[5] for which it refers to the applicable provisions of the Banking Act in several respects.

1 See Article 1 §3 of the Banking Act of 25 April 2014.

2 Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.

3 Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.

4 Firms in this class that are authorised as portfolio management and investment advisory firms are subject to the FSMA Act and the IFR.

5 See Article 3(5).

Table C.1

Governance requirements

	Management committee	Specialised committees	Independent directors
Large stockbroking firms	Yes	4 (audit, risk, remuneration and nomination)	Minimum 2
Other stockbroking firms	No [1]	2 (risk and remuneration) [1]	Minimum 1
Small stockbroking firms	No [2]	0 [2]	0

Source: NBB.

1 Such stockbroking firms may establish a management committee and/or an audit committee or a nomination committee on a voluntary basis. The supervisory authority may require the establishment of a management committee and/or an audit committee or a nomination committee where this is justified by the size, internal organisation or activities of the stockbroking firm and may take into account committees established at group level.

2 Such stockbroking firms may establish a management committee and/or an audit committee or a nomination committee on a voluntary basis, and the supervisory authority may require the establishment of a management committee where the size, internal organisation or activities of the stockbroking firm so justify.

Other stockbroking firms, belonging to the aforementioned class 2, form the object of most of the new rules. This group includes "small stockbroking firms",[1] which are subject to less stringent requirements, as detailed below.

The provisions laying down initial capital requirements are aligned with those of the IFD, which aims to achieve maximum reconciliation of national laws, in keeping with the maximum harmonisation principle.

In terms of governance, large stockbroking firms are subject to the requirements applicable to credit institutions and are therefore required to set up a management committee as well as risk, remuneration, nomination and audit committees.

For other stockbroking firms, the new law no longer formally imposes an obligation to set up a management committee. However, these firms are required to establish a risk committee and a remuneration committee within their statutory management body. They may choose to set up a management committee and committees other than those required by law. The supervisory authority may also require the establishment of a management committee, an audit committee and/or a nomination committee when the size, internal organisation or activities of a stockbroking firm so justify.

1 See Article 23.

Small stockbroking firms are exempt from the obligation to set up specialised committees within their statutory management body and to appoint an independent director.

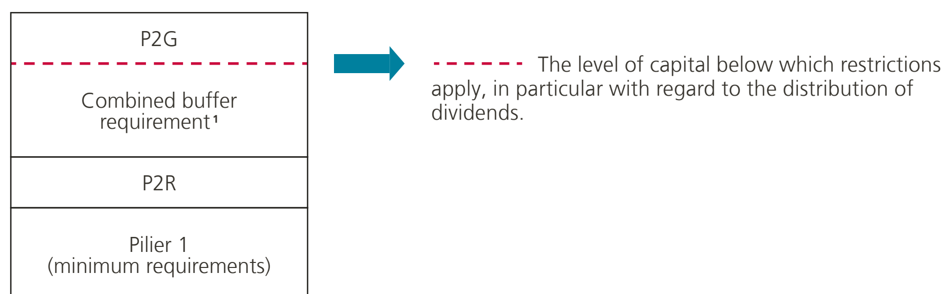
Regardless of the category of stockbroking firm, the law maintains the cap on the variable component of remuneration at the same level as that applicable to credit institutions. The aim is to maintain a level playing field with credit institutions that also engage in asset management activities.

Revision of the methodology to determine Pillar 2 recommendations (P2G)

The methodology to calculate P2G for Belgian less significant credit institutions (LSIs) was revised. As part of the Supervisory Review and Evaluation Process (SREP), the Bank determines the level of Pillar 2 Guidance (P2G) applied to each LSI. P2G indicates the level of capital individual LSIs are expected to maintain to better withstand stress. Previously, the methodology used to calculate P2G was identical to that applied by the ECB between 2017 and 2021 to significant credit institutions (SIs). The basis to determine banks' P2G levels is how they perform in stress tests conducted by the prudential

Chart C.1

P2G as an additional buffer to prudential capital requirements



Source: NBB.
1 The combined buffer requirement consists of various macroprudential requirements and the capital conservation buffer.

supervisor, which examine the impact an economic shock would have on their capital ratios.

Since 2021, the ECB has used a bucketing approach to determine SIs' individual P2G levels, which is based on the amended CRD and SREP guidelines established by the EBA.

In line with the EBA guidelines, the Bank decided to adopt the bucketing approach for Belgian LSIs. Depending on the depletion of their capital ratios as revealed by stress tests, banks are placed in one of four buckets. Each bucket has a corresponding range of P2G. Supervisors set the final P2G per bank based on the bucket to which it belongs, taking into account specificities, such as the bank's risk profile and any special circumstances (reorganisation, accounting adjustments, level of available capital, etc.).

Unlike the Pillar 2 Requirement (P2R), P2G is not legally binding. However, if an LSI considers that its level of available capital will no longer be sufficient in the short or medium term to meet P2G, it must inform the Bank and implement an action plan to restore its capital adequacy.

2. Insurance undertakings

2.1 International policy developments

International standard for capital requirements and a holistic framework

As part of the global convergence of prudential standards for the insurance sector and the promotion of financial stability, the International Association of Insurance Supervisors (IAIS) is working on a common prudential framework for internationally active insurance groups (IAIGs). This includes inter alia the development of an International Capital Standard (ICS) covering several aspects: provisions on the scope of consolidation, the valuation of assets and liabilities, capital components and capital requirements.

During the period under review, ICS 2.0 was tested for the third year in a row. After a five-year observation period, this standard will be applied to all relevant insurance groups operating internationally.

In parallel with the development of the ICS by the IAIS, the United States is developing a so-called aggregation method to calculate a group's capital. The IAIS is currently working on assessment criteria to determine whether the aggregation method produces similar results to the ICS.

In late 2019, the IAIS adopted a holistic framework for the assessment and mitigation of systemic risk in

the insurance sector at the global level. This includes a set of macroprudential provisions, a targeted assessment of the implementation of these provisions and a global monitoring exercise (GME). The GME requires the Bank to submit several reports to the IAIS, for both individual insurers and at national sectoral level. These reports are followed by a discussion with the IAIS on the assessment of potential systemic risks and appropriate prudential measures. The results and conclusions are communicated to the Financial Stability Board (FSB). The GME's findings are shared annually with the general public in the IAIS Global Insurance Market Report. Based on the IAIS's input, the FSB will assess the holistic framework this year and decide whether to maintain it.

In the 2022 GME, based on supervisory priorities, three macroprudential topics were identified as posing a risk to the global insurance market: (1) the weak macroeconomic outlook, high inflation and rising interest rates, (2) the presence of private equity in the shareholder structure of insurance undertakings, combined with excessive reliance on reinsurance in the regulatory arbitrage context, and (3) climate-related risks. The identification of these themes allows national supervisors to monitor the risks in more detail and deepen future GME analyses.

2.2 European policy developments

Revision of the Solvency II Directive

Work on the revision of the Solvency II Directive continued in 2022. Solvency II, the prudential framework for European insurance and reinsurance undertakings, has been applicable since 1 January 2016. It covers a broad range of quantitative and qualitative requirements concerning the taking-up and pursuit of the business of insurance and reinsurance. The Solvency II framework also provides for review mechanisms to make regulatory adjustments based on experience. The mandate of the European Insurance and Occupational Pensions Authority (EIOPA) to provide technical advice to the European Commission by the end of 2020 on the revision of the most relevant points of the Solvency II Directive was thus directly rooted in the directive itself. EIOPA's advice was sent to the European Commission and published on 17 December 2020.

On 22 September 2021, following EIOPA's in-depth analyses, the European Commission put forward a package of legislative proposals for the revision of the Solvency II Directive. These proposals are mainly based on EIOPA's advice but derogate from it in a number of areas. In response to the proposals, EIOPA expressed concerns regarding the relaxation of certain quantitative measures, which could increase risks for insured parties.

Subsequently, the reform package proposed by the European Commission was further analysed in the Council. A policy debate was held between EU economy and finance ministers on 5 October 2021. Work at technical level was then carried out under the Slovenian presidency and continued under the French presidency. On 17 June 2022, the Member States agreed on a common position concerning the adjustments to be made to the European Commission's proposals.

While broadly agreeing with the European Commission's position on the balance of quantitative reforms, the Council considered that it would be useful to, amongst other things, reframe the proportionality principle, to extend the conditions for use of the volatility adjustment, to allow companies to make corrections in the event of artificial overcompensation in order to mitigate the equity volatility this measure could cause, and to support EIOPA's expectations regarding the development of tools or guidelines to harmonise implementation of the proposals.

Within the European Parliament, discussions and debates continued throughout 2022, in preparation for the upcoming interinstitutional negotiations which should lead in the near future to a new final agreement on the Solvency II supervisory framework.

2.3 National policy developments

New circular on liquidity risk management

In March 2022, the Bank set out its expectations for liquidity risk management in Circular NBB_2022_08.[1] These expectations include (i) developing and maintaining appropriate policies, systems, controls and processes, (ii) identifying material risk factors, (iii) developing indicators, (iv) designing and conducting forward-looking scenarios and liquidity

1 Circular NBB_2022_08 on liquidity risk management.

risk stress tests, (v) contingency planning and (vi) periodic reporting.

The circular, which is in line with the principles prescribed by the IAIS, focuses on the key principles for liquidity risk management. As the sources of liquidity risk are specific to each company and group, each entity should understand the liquidity risk factors it faces and apply the principles contained in the circular based on the scale, nature and complexity of its activities and its exposure to liquidity risk.

Periodic reports, which will be collected from 2023 onwards, will provide the Bank with qualitative and quantitative information to allow it to assess the exposure of companies to liquidity risk.

Amendment of the ORSA circular

In March 2022, the Bank updated its ORSA circular[1] to incorporate EIOPA's requirements regarding climate scenarios companies should consider in their own risk and solvency assessment (ORSA). The Bank expects companies to assess the impact of climate-related risks in their ORSA, evaluate the materiality of these risks and subject material risks to scenario analysis.

The ORSA circular was also adapted to include the requirements set out in EIOPA's Supervisory Statement on the use of risk-mitigating techniques, which, amongst other things, stresses the importance of achieving a balance between relaxation of the solvency capital requirement (SCR) and the mitigation of risks for more complex reinsurance structures. Finally, amendments were made to address some of the shortcomings identified in relation to the IAIS holistic framework, in particular the requirements to assess systemic risks through scenario analysis and stress testing.

Communication on the tasks of the actuarial function and the documentation requirements for technical provisions

In November 2022, the Bank addressed a communication[2] to the insurance sector concerning the determination of technical provisions under Solvency II. The regulations in force lay down prudential requirements for the documentation of these technical provisions and the tasks of the actuarial function. However, supervisory work had revealed that some of these prudential requirements were not always met. The Bank therefore considered it necessary to reiterate relevant aspects of the regulations and specify its minimum expectations in this area.

In its communication, the Bank stressed that technical provisions must be exhaustively and systematically documented, in particular the choices made with regard to their quantification: assumptions, expert judgment, calculation methods and the use of data. The Bank also set out its expectations regarding the work of the actuarial function. It expects a report to be produced that presents real added value for supervision, true ownership of the function, the effective implementation of adequately documented quantitative work, and precise and firm recommendations based on the work performed by the actuarial function.

Amendment of the circular on the valuation of technical provisions and the circular on contract boundaries

Based on new EIOPA reports, the Bank updated its circulars on the valuation of technical provisions[3] and contract boundaries.[4] During its review of Solvency II, EIOPA identified several discrepancies regarding the valuation of technical provisions and the determination of contract boundaries. These inconsistencies did not in themselves require changes to the existing legislation but did call for the clarification of its interpretation in certain key areas, such as the projection of expenses in calculating best estimates, cases where stochastic modelling should be used, the identification of insurance contracts that can be unbundled, and the assessment of whether a financial guarantee has a discernible effect on the economics of a contract.

The two final reports published by EIOPA on 21 April 2022 concerning the adaptation of its guidelines on the valuation of technical provisions, on the one hand, and contract boundaries, on the other,

1 Circular NBB_2022_09 on the own risk and solvency assessment (ORSA).

2 Communication NBB_2022_26 on the tasks of the actuarial function and the documentation requirements for technical provisions.

3 Circular NBB_2022_25 on the guidelines on the valuation of technical provisions under Solvency II.

4 Circular NBB_2022_24 on the guidelines on contract boundaries.

are thus in line with efforts to harmonise prudential practices in these areas. After having consulted the various stakeholders, the Bank published on 17 October 2022 an updated version of its own circulars on these guidelines, thus implementing at Belgian level the clarifications introduced by EIOPA.

Amendment of the circular on deferred taxes

The Bank amended its circular on deferred taxes in 2022. Circular NBB_2020_03 of 26 February 2020 on the impact of deferred taxes was applied for the first time to the solvency position as at 31 December 2020. The many methodological questions it raised and the differences in interpretation and implementation between companies led the Bank to carry out a cross-sectional analysis of the subject. The aim of this analysis was, on the one hand, to identify best practices and extend them to the entire market and, on the other hand, to identify and try to remedy shortcomings in the existing methodologies.

The analysis revealed that certain concepts and principles contained in Article 207 of Delegated Regulation 2015/35 needed to be clarified. After consultation with stakeholders, the Bank replaced Circular NBB_2020_03 on 2 November 2022 with a new circular, namely Circular NBB_2022_27 on the valuation of deferred tax assets and adjustment for the loss-absorbing capacity of deferred taxes.

To take into account the complexity of the subject, Circular NBB_2022_27 also introduces a proportional approach by distinguishing between, on the one hand, significant companies and/or companies for which the impact of the loss-absorbing capacity of deferred taxes (LAC DT) adjustment is significant and, on the other hand, less significant companies for which the impact of this adjustment is limited.

Proposal to amend the legislation on natural disasters following the 2021 floods

The floods in July 2021 caused enormous damage, particularly to buildings and businesses, and had a major impact on the lives of many people. Although not all the damage was insured, much of it was compensated by the insurance industry, mainly through the cover integrated into fire insurance for "ordinary risks". These include risks to residential dwellings, agricultural buildings, etc., as described in the legislation.[1] For these risks, it is compulsory for fire insurance to include flood coverage.

1 Article 5 of the Royal Decree of 24 December 1992 implementing the legislation on non-marine insurance contracts.

The legislature imposed this obligation in order to ensure that policyholders were protected against the damage caused by natural disasters.

In addition, in order to ensure the insurability of natural disasters, the legislature has in the past introduced specific mechanisms in the framework of public-private partnerships, such as a limitation on claims per insurer and per natural disaster,[1] above which the regional disaster funds intervene. After the floods in July 2021, the statutory ceiling for insurers was doubled by mutual consent of the Regions and the insurance sector. This resulted in an increase in the share of claims covered by insurance and reinsurance undertakings.

Following the floods in July 2021, discussions also started on a new statutory framework for natural disasters, taking into account the lessons learned from this recent event. The aim was to develop a more robust legislative framework, which provides greater legal certainty in the event of exceptional natural disasters. The focus was on the calibration of a new statutory ceiling for insurers and its future development. However, more than a year after the floods, there is still no statutory framework clarifying the distribution of the cost of claims related to future natural disasters. This situation is a source of legal uncertainty for all parties and has resulted in, amongst other things, a lack of clarity on the level of reinsurance intervention and, therefore, the costs related to the reinsurance of catastrophe risk for Belgian insurers. As a result, some insurers have seen their reinsurance premiums increase considerably, while others are no longer able to obtain full reinsurance cover. However, not all insurance undertakings active on the Belgian market are in the same situation. Indeed, the impact varies depending on whether a company has access to reinsurance through the international groups to which it belongs or only through Belgian companies.

From a regulatory perspective, this uncertainty could lead to a major revision of the models used to determine the level of capital requirements for insurance undertakings, which in turn could have a negative impact on their solvency. These difficulties and uncertainties could also, in the long run, increase policyholder premiums.

1 Article 130 §2 of the Act of 4 April 2014 on insurance.

In order to provide greater certainty to all parties concerned, the competent federal and regional authorities need to ensure a clear statutory framework. Clarification is needed on the distribution of the costs of future natural disasters in Belgium, the financing of regional disaster funds, the treatment of insured and uninsured claims and the robustness of the existing framework in light of climate change. Given that all Regions are liable to be affected by natural disasters in the future and that most Belgian fire insurers operate throughout the country, a consistent approach between Regions is desirable.

3. Cross-sectoral aspects

As a prudential supervisory authority, the Bank has jurisdiction over a range of fields covering multiple sectors that are not discussed in previous sections of this report. The aspects examined in this section include the Bank's initiatives concerning the prevention of money laundering and terrorist financing, the regulatory and prudential developments surrounding climate-related risks, the rules on external functions, and the update of its Fit & Proper Manual. In addition, box 9 discusses the five-year assessment of the Belgian financial sector and oversight to be conducted by the International Monetary Fund (IMF) in 2023.

3.1 Prevention of money laundering and terrorist financing

European Union

The European statutory and regulatory framework

The European legislative process initiated in 2021 continued in 2022. On 20 July 2021, the European Commission published four ambitious legislative proposals to strengthen the fight against money laundering and terrorist financing (AML/CFT) in Europe (for an overview, see section II.B.3.1 of the Bank's 2021 annual report). The legislative process, which involves both the Council and the European Parliament, continued during the year under review and is expected to be completed in 2023.

The work of the EBA

The EBA plays a leadership, coordination and monitoring role in promoting integrity,

transparency and security in the financial system by adopting measures to prevent and combat money laundering and terrorist financing in the financial system. The AML Standing Committee of the EBA continued its work at seven meetings in 2022 chaired by a Bank representative. Several milestones are highlighted below.

On 31 January 2022, the EBA launched its central database called EuReCa, which gathers information on significant deficiencies identified by national authorities in the AML/CFT arrangements of financial institutions and the measures taken to address them.[1] EuReCa helps the EBA and national authorities develop their understanding of the money laundering and terrorist financing (ML/FT) risks affecting the EU financial sector.

During the year under review, the EBA continued the work it began in response to the major AML/CFT incidents that affected the European banking sector a few years ago, assessing the effectiveness of AML/CFT supervision by individual national authorities (implementation reviews). On 22 March 2022, the EBA published[2] its conclusions following the first two rounds of assessments, conducted from 2019 to 2021, which involved 14 competent authorities, including the Bank, in 12 EU Member States (see below). The EBA listed several common challenges for individual supervisors: (i) identifying AML/CFT risks in the banking sector and at the level of individual banks; (ii) translating AML/CFT risk assessments into risk-based supervisory strategies; (iii) effectively mobilising available resources, including sufficiently pervasive off-site and on-site monitoring; and (iv) taking proportionate and sufficiently dissuasive enforcement action to address AML/CFT shortcomings.

Following Russia's invasion of Ukraine, the EBA issued a communication on 27 April 2022 to financial institutions and supervisors to do their utmost to enable Ukrainian refugees to access at least basic financial products and services.[3] The communication clarified how the EBA's AML/CFT guidance should be applied and how financial institutions can adapt their AML/CFT measures to provide a pragmatic and proportionate response to the compliance challenges they face.

Finally, the EBA published on 1 September 2022 its second report on the functioning of AML/CFT supervisory colleges in the EU.[4] The aim of these colleges, in which the Bank actively participates as lead supervisor or permanent member, is to intensify and systematise the exchange of information and cooperation between national supervisory authorities in a proportionate manner. In its report, EBA comments on good practices to help competent authorities increase their efficiency going forward and highlights several areas for improvement.

The Bank's AML/CFT actions

Throughout the year under review, the Bank's experts continued to make a significant contribution to the European Council's discussions, in particular on the proposals to establish a European AML/CFT authority, to fully harmonise AML/CFT rules at the European level and to define the AML/CFT arrangements that Member States must establish or maintain at national level. It is clear that the implementation of these proposals will fundamentally change the EU's legal and institutional AML/CFT framework.

As mentioned above, the EBA continued implementation reviews and carried out a detailed assessment in 2020 and 2021 of the Bank's internal organisation dedicated to AML/CFT supervision, its methods and concrete supervisory actions, as well as the results obtained. The EBA's final report, which was sent to the Bank on 8 February 2022, recognises the significant efforts made by the Bank in recent years, in particular through an increase in terms of the resources mobilised and the development of risk-based supervision. However, as AML/CFT supervision has now entered a more stable phase, the EBA called for further strategic thinking in several areas and made a number of recommendations, the main ones being:

- paying greater attention to the risk of terrorist financing;
- refining the methodology to assess sectoral and institution-specific risks in order to better address

1 For more information on EuReCa, see the EBA's website.
2 EBA Report on competent authorities' approaches to the anti-money laundering and countering the financing of terrorism supervision of banks (round 2 - 2020/21), 22 March 2022.
3 EBA statement on financial inclusion in the context of the invasion of Ukraine, 27 April 2022.
4 EBA Report on the functioning of anti-money laundering and counter-terrorist financing colleges in 2021, 1 September 2022.

ML/FT risks in Belgium, so that they can be integrated into the overall supervisory strategy;
- strengthening the proactive and pervasive nature of off-site monitoring and reviewing the balance between on-site and off-site monitoring;
- reviewing the approach to remedies and sanctions based on the principles of proportionality and effectiveness (including through disclosure).

In order to respond to the EBA's recommendations, the Bank's AML/CFT department has defined a number of actions to be implemented in 2022 and 2023 (e.g. further development of a comprehensive supervisory strategy and of supervisory methodology and tools). Emphasis is also placed on the deployment of additional resources for off-site and, more importantly, on-site AML/CFT monitoring. This action plan also aims to prepare the Bank for the fifth assessment of the Belgian AML/CFT regime by the Financial Action Task Force (FATF), which will take place in 2024.

At the national level, the Bank continued to support the "public-private platform" and again contributed actively to its work. This AML platform was established in June 2020 to strengthen the dialogue between public and private stakeholders, in order to enhance the effectiveness of AML/CFT actions in Belgium. In 2022, the platform was extended to the judicial and police authorities, a development which the Bank very much welcomed. The participation of these public actors has already allowed – and will continue to allow – exchanges between all parties concerned with the aim of increasing their understanding of the criminal activities taking place in Belgium and, consequently, of the money laundering risk arising from such activities which entities subject to AML obligations are likely to face.

Regarding the risk of money laundering in connection with serious tax fraud, the Bank continued to clarify in 2022 its expectations in terms of the due diligence to be exercised by financial institutions as to the origin of large sums repatriated from abroad. In line with its circular of 8 January 2021,[1] the Bank has implemented a specific action plan to verify that this circular is effectively applied by all financial institutions engaged in private banking or the issuance of single premium life insurance policies, as they are particularly vulnerable to the risks associated with the repatriation of funds with potentially unclear tax origins. The Bank thus ascertained that each such institution had effectively instructed its internal audit team to review past due diligence measures and to formulate, if necessary, suitable recommendations to remedy any weaknesses and shortcomings found. The Bank also ensured that these recommendations had been translated into appropriate action plans including, if necessary, a re-examination of repatriated funds. In the future, it will verify that these action plans are being effectively implemented. The Bank's actions showed that financial institutions are paying greater attention to examining the origin of large repatriations of funds.

In line with the EBA's work to mitigate the impact of de-risking, on which it published an opinion and report on 5 January 2022,[2] the Bank also made its expectations in this area known through its circular of 1 February 2022.[3] The Bank's guiding principle in this circular is that a decision to refuse to enter into a business relationship or to terminate such a relationship for AML/CFT-related reasons should be based on an individual assessment of the ML/FT risks associated with the relationship in question, taking into account the specific characteristics. This means that such decisions cannot be based solely on an assessment of the generic risks associated with the category of customers to which the person concerned belongs, without taking into account possible risk mitigating factors that would emerge from an individual analysis. Institutions should also consider the measures they can take to mitigate the ML/FT risks associated with a business relationship, so that they can still enter into or maintain a relationship where appropriate. Following the publication of this circular, the Bank took individual actions to raise financial institutions' awareness of the adverse effects of de-risking and is carrying out supervisory actions to identify and remedy bad practices in this area.

More generally, the Bank has stepped up its AML/CFT efforts in recent years. To this end, it has developed a risk-based approach, combining remote supervision with on-site inspections, as well as tools

1 Circular NBB_2021_12 on due diligence obligations regarding the repatriation of funds from abroad and taking into account tax regularisation procedures when applying the Anti-Money Laundering Act, 8 June 2021.

2 EBA Opinion and Report on 'de-risking' and its impact on access to financial services, 5 January 2022.

3 Circular NBB_2022_03 on prudential expectations on de-risking, 1 February 2022.

to assess financial institutions' compliance with their statutory and regulatory obligations in this area and the effectiveness of their AML/CFT mechanisms. The Bank has also gradually allocated more staff to carry out these checks. These intensified checks have allowed it to identify – in some cases worrying – weaknesses in a significant number of financial institutions, which must be addressed effectively and decisively. When it finds such weaknesses, the Bank generally requires the financial institution concerned to draw up a detailed action plan to remedy them systematically and sustainably. However, where warranted by the seriousness of the findings, the Bank may use its statutory powers to take formal and pervasive administrative measures in order to compel financial institutions to take the necessary steps to correct weaknesses. In particular, the Bank may set strict deadlines by which the required remedial measures must be implemented or it may partially suspend an institution's authorisation to do business, preventing it from entering into business relationships with new customers until the statutory or regulatory due diligence requirements have been effectively and efficiently implemented. Given the strict procedures to be followed, such coercive processes require the Bank to commit significant human resources. While the Bank regards such measures as necessary, it hopes that they will lead to positive developments within financial institutions so that they will be needed less frequently in the future.

3.2 Regulatory and prudential policy developments concerning climate-related risks

The Bank pays particular attention to climate-related risks. Critical and chronic climate events (physical risks), as well as the necessary transition to a more sustainable, low-carbon economy (transition risks) pose structural economic changes and thus risks to financial stability.

Initiatives by the Bank

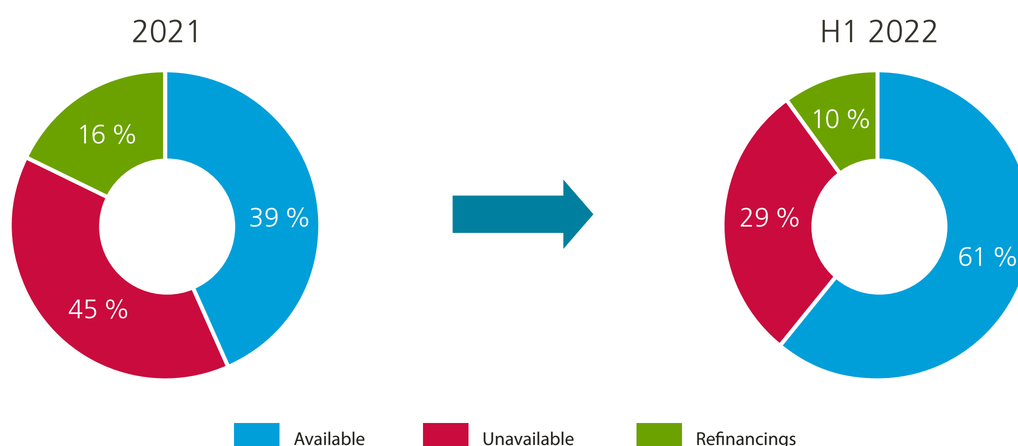
One of the main risks to the financial sector identified by the Bank in this regard is the transition risk associated with energy-inefficient buildings. As explained in detail in the Bank's Financial Stability Report 2020,[1] the energy inefficiency of buildings is an important driver of transition risk and credit risk for credit institutions. The energy inefficiency of a building affects its value[2] and therefore the collateral for mortgages in the event of borrower default. This correlation is likely to increase as regulations to reduce greenhouse gas emissions increase and buyers

1 Van Tendeloo, B. (2020), "Climate-change related transition risk associated with real estate exposures in the Belgian financial sector", NBB, *Financial Stability Report*, pp. 141-150.

2 See Reusens, P., F. Vastmans and S. Damen (2022), "The impact in changes in dwelling characteristics and housing preferences on Belgian house prices", NBB, *Economic Review*.

Chart C.2

Availability of information on the energy performance of buildings for new residential mortgage loans granted by Belgian banks[1]



Source: NBB.
1 For refinancings, banks are not obliged to provide the Bank with information on the energy performance of buildings.

become more aware of the importance of the energy performance of buildings. The current energy crisis has already contributed to increasing this awareness. In addition, the higher costs associated with energy-inefficient buildings can affect repayment capacity.

To this end, the Bank issued a circular at the end of 2020 outlining its expectations for the collection and integration of energy efficiency data for real estate exposures into risk management. Such data must be reported to the Bank for new residential mortgage loans.

During the year under review, the Bank analysed the data reported and the actions taken by the banking sector. As shown in chart C.2, banks are increasingly able to collect such data, at least for new mortgages. For existing loans, however, it appears more difficult to do so. For this reason, the Bank has been actively supporting the banking sector's efforts to access regional databases on energy performance certificates (EPC) for buildings. For the time being, however, financial institutions have to request these certificates from their customers, provided they are available. The first reports have provided the Bank with useful information on the difficulties encountered by banks in collecting this information and the solutions some of them have found to remedy this situation.

The monitoring of these data, as well as their integration into banks' risk management and risk appetite, is constantly being strengthened and improved. For example, when financing the purchase of an energy-inefficient property, the possible consequences for the value of the building and the higher energy costs are taken into account. In addition, banks are increasingly providing advice to their customers to help them improve the energy efficiency of their properties. The Bank has provided information to the industry on good practices in this area which it has observed at some banks, so that other institutions can learn from them.

The Bank applies a proportionate approach to smaller banks. In mid-2021, the Bank sent out a questionnaire to smaller institutions (LSIs) subject to its direct supervision. This questionnaire allowed them to assess for themselves how well they are meeting climate and environmental risk expectations. For large institutions (SIs), the ECB published expectations at the end of 2020.[1] The Bank based its expectations for LSIs on this foundation, but taking into account the nature, scale and complexity of their activities.

1 ECB (2020) Guide on climate-related and environmental risks, Supervisory expectations relating to risk management and disclosure, November 2020.

In 2022, institutions were personally informed of the main areas for improvement. In 2023, a new information session on this subject will be organised for the banking sector.

For the insurance sector, the Bank updated its circular on the own risk and solvency assessment (ORSA)[1] in March 2022, to incorporate the EIOPA requirements on climate change scenarios. The Bank expects companies to take into account the impact of climate-related risks in their ORSA (see section D.2 on operational supervision of insurance undertakings).

Since November 2022, the Bank has published a dashboard on its website[2] containing a series of economic and financial indicators informing the general public about the consequences for the economy and the financial system of climate change and the transition to a net-zero economy. Through this initiative, the Bank emphasises its focus on climate change and the related challenges and wishes to inform relevant stakeholders. By means of greater transparency, the Bank aims to facilitate the transition to a carbon-neutral economy. The dashboard is updated regularly.

European and international initiatives

At the European and international levels, regulators and supervisors are taking various initiatives to integrate climate and environmental risks into reporting obligations (Pillar 3 and other reporting requirements), company-specific risk assessments (Pillar 2) and minimum capital requirements (Pillar 1).

Pillar 3 and other reporting obligations

One of the major challenges facing financial institutions and regulators is the lack of high-quality, uniform and internationally comparable data to assess climate and environmental risks. The new Corporate Sustainability Reporting Directive (CSRD),[3] which requires banks and large companies to report on sustainability in accordance with the European Sustainability Reporting Standards (ESRS),[4] is therefore very important. This directive was adopted in 2022 and will enter into force in 2024. In order to ensure globally harmonised reporting, it was ensured that the European sustainability standards were aligned insofar as possible with the international sustainability reporting standards drawn up by the International Sustainability Standards Board (ISSB), whose first proposals have been published.[5] BCBS supports the development of these international reporting standards and is also examining the need for additional specific reporting requirements on climate-related risks for banks (Pillar 3). At the European level, the EBA published a Pillar 3 reporting requirement[6] for environment, social and governance-related risks (ESG risks) in 2022. From 2023, banks with listed securities will have to report on their ESG risks. In addition, the European supervisory authorities (EBA, EIOPA and ESMA) have also published details of the reporting required by the Sustainable Finance Disclosure Regulation (SFDR).[7]

Pillar 2

With regard to the assessment of institution-specific risks (Pillar 2), the Basel Committee has established a set of principles for the effective management and control of climate-related risks by banks.[8] At the European level, the EBA published a similar report in June 2021,[9] but on ESG risks. In October 2022, it published an extension to this report for investment firms. The European Commission's CRD6 and CRR3 proposals (part of the banking package, see section C.1.2) provide that the EBA, based on this report, will issue more explicit guidelines for the management and

1 Circular NBB_2022_09, own risk and solvency assessment (ORSA), 23 March 2022.

2 NBB Climate Dashboard.

3 EUR-Lex – 32022L2464 - EN – EUR-Lex (europa.eu).

4 The new reporting requirements should be published by mid-2023. A first set of standards, which have already formed the object of a consultation round, has been published by EFRAG (Public consultation on the first set of Draft ESRS).

5 ISSB Exposure Drafts General Sustainability Standards and Climate-related Disclosures .

6 Commission Implementing Regulation (EU) 2022/2453 of 30 November 2022 amending the implementing technical standards set out in Implementing Regulation (EU) 2021/637 as regards the disclosure of information on environmental, social and governance risks.

7 Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability disclosure in the financial services sector.
– Final Report on draft RTS regarding fossil gas and nuclear energy investments, September 2022.
– Joint ESAs' Report on the extent of voluntary disclosure of principal adverse impact under the SFDR, July 2022.
– Clarifications on draft RTS under SFDR, June 2022.
– Updated Joint ESA Supervisory Statement on the application of SFDR, March 2022.

8 BCBS (2022), Principles for the effective management and supervision of climate-related financial risks, June 2022.

9 EBA (2021), EBA Report on management and supervision of ESG risks for credit institutions and investment firms, June 2021.

BOX 8

ECB climate risk stress test

In 2022, the ECB conducted a stress test on significant institutions (SIs). The exercise proved informative for both banks and supervisors, but it cannot yet be considered a real test. Too much information is still missing and the methodologies, models and scenarios need to be further developed. Therefore, the results cannot currently be used to determine additional capital requirements.

The ECB's stress test consisted of three parts. In the first part, the ECB examined how advanced banks were in conducting climate stress tests and scenario analyses. The ECB expects the banks it supervises to conduct their own stress tests and scenario analyses to assess climate risks. Most banks do not presently do so : 59 % have not yet integrated climate-related risks into their stress tests. All major Belgian banks report having a framework for climate risk stress testing. However, the methodologies and data used require improvement.

In the second part, banks were asked to calculate indicators specifying the extent to which their assets and income are linked to counterparties with high greenhouse gas emissions. This allowed the ECB to measure the transition risks to which banks are exposed, as such counterparties are likely to be more affected by measures taken to mitigate the effects of climate change. In the third part, the ECB formulated scenarios for the stress test itself, for both physical and transition risks, which then had to be assessed by the banks.

However, these risk assessments most likely underestimate potential impacts. The climate scenarios do not appear to have been highly unfavourable. The heat and drought scenario, for example, looked only at the impact of such events on productivity. Other consequences, such as possible migration flows, higher food prices or even food shortages due to crop failures, were not taken into account. Furthermore, banks' current models are designed to calculate losses during periods of recession, while the scenarios did not cover a slowdown in economic growth. Consequently, the models are not adequately adapted to the scenarios.

supervision of ESG risks, as well as for the preparation of specific prudential reporting of ESG risks to the supervisory authorities. The proposals also include an obligation for banks to establish transition plans. The proposals empower supervisors to require banks to take action if the transition plans deviate from the EU's 2050 net zero emissions targets and if banks fail to manage the associated risks. The ECB conducted an in-depth thematic analysis of the extent to which significant institutions (SIs) meet the expectations set out by the ECB in its guidance on climate and environmental risk management and reporting, as a follow-up exercise to the 2021 self-assessment. The results were published in November 2022, along with certain good practices identified during the analysis.[1,2] Like other major institutions in the SSM, major institutions under Belgian law still have a long way to go to fully meet all expectations and to adequately manage climate and environmental risks. Nevertheless, it can be said that the practices of some Belgian institutions are already relatively well developed. In addition, the ECB carried out a climate stress test (see box 8). In July 2022, it published the

1 ECB Banking Supervision (2022), Walking the talk – Banks gearing up to manage risks from climate change and environmental degradation, November 2022.

2 ECB Banking Supervision (2022), Good practices for climate-related and environmental risk management, observations from the 2022 thematic review, November 2022.

results of this test.[1] However, due to the limitations still associated with this type of exercise, too much importance should not be attached to the results; it should be seen primarily as a learning opportunity for both credit institutions and supervisors. All major Belgian banks appear to have a framework in place for climate stress testing, which is not the case for most SSM banks. However, the methodologies and data needed to perform these tests must still be improved. At the end of December 2022, the SSM released a set of best practices[2] intended to allow banks to improve their practices in this area.

For the insurance sector, as of 2022, climate risks are included in the IAIS Global Monitoring Exercise (GME).[3] At the European level, in August 2022 EIOPA published guidance on climate change materiality assessments and the use of climate change scenarios in ORSA.[4] This guidance, which follows EIOPA's opinion of April 2021 on the supervision of the use of climate change risk scenarios in ORSA,[5] aims to facilitate the

1 ECB Banking Supervision (2022), 2022 Climate Risk Stress Test, July 2022.
2 ECB Report on good practices for climate stress testing, December 2022.
3 IAIS, Global Insurance Market Report, December 2022.
4 EIOPA, Application guidance on climate change materiality assessment and using climate change scenarios in the ORSA, August 2022.
5 EIOPA, Opinion on the supervision of the use of climate change risk scenarios in ORSA, April 2021.

application of this opinion and to help reduce implementation costs for insurance undertakings, especially small and medium-sized ones. In December 2022, EIOPA launched a dashboard on the natural catastrophe insurance protection gap for five different perils (windstorms, floods, coastal flooding, earthquakes and wildfires) in the 30 EEA countries.[6] This dashboard provides a current overview of the protection gap based on a modelling approach, a historical view based on historical loss data, and information on how natural catastrophes are covered per country.

Pillar 1

With regard to minimum capital requirements (Pillar 1), the BCBS published a series of clarifications at the end of 2022 on how climate risks should be treated in the current supervisory framework.[7] In addition, the BCBS is considering the need to adapt the framework for minimum capital requirements. In this regard, the EBA launched a discussion in May 2022 on how climate and environmental risks should be included in Pillar 1 of the prudential framework for credit institutions and investment firms.[8] The con-

6 EIOPA (2022) Dashboard on insurance protection gap for natural catastrophes.
7 BCBS,2022), Frequently asked questions on climate-related financial risks, December 2022.
8 EBA (2022), Discussion paper on the role of environmental risks in the prudential framework, May 2022.

sultation document revisits key elements such as the time horizon, the inclusion of forward-looking aspects in the prudential framework and the general calibration of capital requirements. EIOPA also published a report in December 2022 which considers the extent to which Pillar 1 could be adapted to better reflect climate-related risks.[1]

The ESRB and the ECB are jointly exploring how macroprudential measures can contribute to addressing climate-related risks to the financial sector as a whole. In this context, they have published a report[2] on how climate shocks could affect the European financial system. The report also includes initial reflections on potential macroprudential measures to address sectoral and cross-border risks to complement and reinforce microprudential efforts.

3.3 External functions and update of the Fit & Proper Manual

External functions

The Bank updated its rules on the exercise of external functions by managers of financial institutions through its Regulation of 9 November 2021, approved by the Royal Decree of 8 February 2022,[3] and its Communication of 12 July 2022,[4] which applies to all financial institutions subject to its prudential supervision. The previous rules were amended in a number of respects. For example, the rules on external functions now also apply to the persons responsible for independent control functions. In addition, the requirements regarding conflicts of interest were strengthened: whereas managers were previously only required to refrain from engaging in discussions about existing or future relationships between the supervised institution and the company in which the external function is performed, they are now also prohibited from influencing these discussions in any way, regardless of the stage and level of decision-making. Changes were also made to the way in which the Bank should be notified of new external functions performed by serving managers.

Update of the Fit & Proper Manual

The various supervisory provisions applicable to financial institutions require directors, senior managers (including members of the management committee) and persons responsible for an independent control function in these institutions to have the expertise and professional integrity required for their positions. The assessment of the suitability of such persons is often described as a fit & proper assessment.

Suitability has formed the object of several recent regulatory developments at the international level, including by the EBA and ECB.[5] The Bank's policy in this area has also evolved (with regard to independent directors, the age of information, the treatment of external functions, etc.) since the publication of its Fit & Proper Manual in 2018.

Consequently, at the end of 2022, the Bank deemed it necessary to update its Fit & Proper Manual, which sets out the prudential standards to be followed by all financial institutions under its supervision for the fit & proper assessment of their managers and persons responsible for independent control functions. One of the main changes was the restructuring of the suitability assessment criteria into five categories: expertise, professional integrity, time commitment, independence of mind and collective suitability. In addition, the updated manual strengthens prudential expectations on time commitment by specifying that members of the statutory management body should dispose of the time necessary to cover all important topics, including risk strategy and management, in depth. Expectations in terms of collective suitability have also been clarified: the statutory management body should collectively possess the necessary knowledge, skills and experience to understand the institution's business, including the main risks to which it is exposed. Particular attention is now paid to information technology and security risks, environmental and climate

1 EIOPA-BoS, Prudential treatment of sustainability risks, Discussion Paper, November 2022.
2 ECB/ESRB (2022), The macroprudential challenge of climate change, July 2022.
3 Royal Decree of 8 February 2022 approving the Regulation of the National Bank of Belgium of 9 November 2021 on the exercise of external functions by managers and persons responsible for independent control functions of regulated companies and repealing the Regulation of 6 December 2011 on the exercise of external functions by managers of regulated companies (Belgian Official Gazette of 25 February 2022).
4 Communication NBB_2022_19 of 12 July 2022 on the exercise of external functions by managers and persons responsible for independent control functions of regulated companies.
5 EBA Guidelines of 2 July 2021 on the assessment of the suitability of members of the management body and key function holders (EBA/GL/2021/06) and SSM Guide to fit & proper assessments of December 2021.

risks, and the need to have specific knowledge on the prevention of money laundering and terrorist financing, etc. Furthermore, the concept of independence of mind has been clarified: members of the statutory management body must be able to take decisions completely objectively and independently in the interest of the company and its stakeholders, without being subject to conflicts of interest. At the organisational level, a number of new requirements were defined, including the development of a suitability and diversity policy, the establishment of procedures and processes for the selection and succession planning of managers, the development of a policy and procedures for the induction and training of members of the statutory management body, etc. The manual now also includes a list of events that should trigger a reassessment of the individual or collective suitability of managers. Finally, it confirms that persons newly appointed to the statutory management body under an early intervention or resolution procedure should also be subject to a suitability assessment, but that this assessment may take place after the person takes office.

BOX 9

Analysis of the Belgian financial sector and IMF review of the sector (FSAP)

The next Financial Sector Assessment Program (FSAP) for Belgium is scheduled for 2023. This is a periodic in-depth analysis of the local financial sector, financial stability and supervision, conducted by IMF experts. Belgium is one of about 30 countries that have to participate in an FSAP every five years. The last FSAP took place in 2017, with the results published in 2018.

In practice, the FSAP consists of an exploratory phase (conducted remotely) and two main phases of about three weeks (on site in the country). The exploratory phase aims to define the scope of the FSAP and familiarise the IMF experts involved with the sector, institutions, institutional framework and regulations.

During the FSAP, due attention is paid to banking and insurance supervision as well as to the financial situation of Belgian banks and insurers and the risks to which they are exposed. In this respect, stress tests are also organised for banks and insurers. For banks, these tests will coincide with the EBA's biennial stress test planned for 2023, with which the FSAP will be aligned. In addition, non-bank financial intermediation (NBFI) and links between financial institutions are examined in detail.

Supervision of financial market infrastructures is also a key theme of the Belgian FSAP. The IMF will assess the implementation of international principles[1] for risk management and the supervision of financial market infrastructures by Euroclear, the Belgium-based clearing house.

Another recurring theme is crisis management and the financial safety net, with the following main sub-themes: the functioning and financing of the deposit guarantee scheme, operational aspects of crisis

1 Principles for Financial Market Infrastructures, Committee on Payment and Settlement Systems and International Organization of Securities Commissions (IOSCO), April 2012.

management, bank recovery and resolution plans, the role and functioning of the resolution authority, and emergency liquidity assistance.

Finally, the FSAP also analyses money laundering prevention policies and the oversight thereof by the Belgian authorities.

The Bank is the Belgian coordinator and contact point for the FSAP, but many other institutions and authorities are obviously also closely involved, including (1) Belgian public authorities such as the FSMA, the Federal Public Service Finance, the Cabinet of Finance and the Guarantee Fund, (2) European authorities such as the SSM, the ECB and the Single Resolution Board (SRB), and (3) Belgian financial and academic institutions. The IMF also organises an FSAP at the level of the euro area.

The FSAP for Belgium will result in a public report with an overall risk assessment and specific recommendations on the approach to certain points for attention. In addition, a series of technical documents will be published at the end of 2023 on sub-topics to be explained in more detail.

D. Operational supervision

1. Banks

1.1 Mapping of the banking and investment sector

In 2022, the number of banks incorporated under Belgian law remained stable. However, a decrease in the number of banks can be expected in 2023, given the announcement by NewB in the autumn of 2022 that it would cease its banking activities. This cooperative bank only obtained a licence in early 2020, after having raised sufficient minimum capital through a public offering of cooperative shares, intended to allow it to absorb initial losses and meet capital requirements in its first years. Despite the success of its fundraising, however, NewB had great difficulty meeting its business objectives. Persistent losses severely strained its equity base and a further capital increase became necessary. When this proved impossible, NewB decided to cease its banking operations.

In 2022, the number of bank branches declined by three. One new European Economic Area (EEA) branch was registered (BNP Paribas SA Belgium Branch), while three others were deregistered (JP Morgan Bank Luxembourg, BNP Paribas Securities and Commerzbank AG Brussels Branch). One non-EEA branch was also deregistered (JP Morgan Chase Bank). At the end of 2022, a few EEA branch registrations were still being processed. At the beginning of 2022, Record Credits SA was included on the list of "financial institutions governed by Belgian law that are subsidiaries of one or more credit institutions governed by Belgian law and that are authorised to carry out their activities in other EEA Member States", in this case Luxembourg.

The number of Belgian investment firms fell again, this time by two. The licence of Caceis Belgium was withdrawn following the transfer of its activities to the Belgian branch of the French bank Caceis, while that of Merit Capital was revoked by the Bank.

In the euro area, banking supervision is carried out by the SSM, on the basis of cooperation between the ECB and the national supervisory authorities. The ECB exercises direct supervision over all significant institutions (SIs) and is assisted in this regard by the national supervisory authorities. The national supervisory authorities are responsible for direct supervision

Table D.1

Number of institutions subject to supervision

(end-of-period data)

	2021	2022
Credit institutions	102	100
Under Belgian law	30	30
Branches governed by the law of an EEA member state	47	45
Branches governed by the law of a non-EEA member state	6	5
Financial holding companies	8	8
Financial services groups	4	4
Other financial institutions [1]	7	8
Investment firms	25	23
Under Belgian law	14	12
Branches governed by the law of an EEA member state	10	10
Branches governed by the law of a non-EEA member state	0	0
Financial holding companies	1	1

Source: NBB.

1 Specialist subsidiaries of credit institutions and credit institutions associated with a central institution with which they form a federation.

Table D.2

Belgian banks grouped according to the SSM classification criteria

Significant institutions (SIs)	Less significant institutions (LSIs)
Belgian parent	Vodeno (financial holding company) – Aion
Argenta	Anbang (financial holding company) – Nagelmackers Bank
Crelan Group : Crelan, Europabank, AXA Bank Belgium	Degroof Petercam
Belfius	Byblos Bank Europe
KBC Group – KBC Bank, CBC	CPH
Non-Belgian SSM-member parent	Dexia (financial holding company)
BNP Paribas Fortis, bpost bank	Datex (financial holding company) – CKV
Beobank, Banque Transatlantique Belgium	Dierickx-Leys
ING Belgium	ENI
MeDirect Bank	Euroclear (financial holding company) – Euroclear Bank
Non-Belgian SSM-member parent not governed by the law of an EEA member country	FinAx (financial holding company) – Delen Private Bank, Bank J. Van Breda
Bank of New York Mellon	NewB
	Shizuoka Bank
	United Taiwan Bank
	Van de Put & C°
	vdk bank

Source : NBB.

of less significant institutions (LSIs), although the ECB has the option to take over this supervision if doing so would be justified to ensure the consistent application of supervisory standards.

In 2022, certain changes were made to supervision, based on the breakdown of Belgian banks in accordance with the SSM classification criteria. On the one hand, following the acquisition of Axa Bank Belgium by CrelanCo, which is also a shareholder of Crelan and Europabank, the ECB, which had already been responsible for the supervision of Axa Bank Belgium, became, along with the Bank, responsible for the direct supervision of Crelan and Europabank.

On the other hand, due to a series of changes in its group structure, Bank Degroof Petercam no longer met the ECB's criteria to be considered a significant institution. Consequently, this bank will again be subject to direct supervision by the Bank.

As a result of the abovementioned developments, the Belgian LSI group now includes 16 local and/or specialised banks. This number rises to 24 if financial holding companies, incorporated under Belgian or foreign law, of smaller institutions are included. When calculating the number of LSIs, the new division between approved and exempt (mixed) financial holding companies (see section C.1.2 below) was not taken into account, as the activities relating to this classification had not yet been completed at the time of writing.

1.2 Supervision priorities

New regulation for the approval or exemption of (mixed) financial holding companies

In 2022, supervision focused on the effects of the transposition of Article 21a of CRD V into Article 212/1 *et seq.* of the Banking Act. These provisions introduce new rules on the approval of financial holding companies and mixed financial holding companies, intended to ensure the adequacy of the organisation of a banking group, whether it be headed by a credit institution, a financial holding company or a mixed financial holding company.

In Belgium, financial holding companies and mixed financial holding companies have been subject to prudential supervision since well before the introduction

of these provisions. As a result, they already had to comply with certain prudential requirements on both a consolidated and, for certain matters, individual basis.

The main effect of the new provisions is to formally establish the assessment and supervision of compliance with prudential requirements for financial holding companies and mixed financial holding companies in the EU and to clarify the role of the competent authorities.

Supervisory authorities must therefore determine whether the conditions to obtain and maintain an approval have been met and verify the adequacy of the management and coordination of the group's activities by the parent financial holding company or mixed financial holding company. Subject to compliance with certain strict conditions, mainly related to the absence of involvement in the conduct of the activities of regulated entities in the banking sector, a financial holding company or a mixed financial holding company may also be exempted from the requirement to obtain an approval.

Inspections

Effective microprudential supervision consists of two essential components: inspections and ongoing monitoring. These are inseparable and complementary but not interchangeable. Microprudential supervision requires in-depth knowledge of the supervised institutions. This knowledge can be obtained in two ways: on the one hand, through permanent monitoring, during which the financial position of a specific institution and the related risks are monitored on a continuous basis, and, on the other hand, through inspections, during which, on the basis of a clearly delineated assignment carried out in accordance with an audit methodology, spot checks are performed within an institution. Inspections include both specific supervisory tasks and the validation of internal quantitative models used by some institutions to calculate their capital requirements.

The objectives of microprudential supervision can only be achieved if the analyses, reviews and follow-up result in deliverables leading to operational supervisory decisions and actions with respect to the institution.

BOX 10

Inspections

The objective of an inspection is to conduct an in-depth analysis of (i) the various (inherent) risks to which the institution is exposed, (ii) the quality of the internal control systems and governance structure, (iii) the business models used, and (iv) the institution's compliance with laws and regulations.

Inspections are mainly carried out at the premises of the inspected institution in accordance with a pre-determined schedule. The scope and objectives of the inspection are defined in cooperation with the permanent supervision team. Inspections are risk-based, proportional, pervasive, prospective and pragmatic.

An inspection is carried out under the responsibility of a chief inspector, independently of, but in coordination with, the permanent supervision team.

The inspection consists of several steps:

- For each inspection, an inspection memorandum is drawn up during the preparatory phase and in consultation with the permanent supervision team. This is an internal document describing the reasons for the inspection, its scope and objectives. The institution to be inspected is then informed of the inspection, the subject matter of the inspection and the start of the inspection by means of a letter.

Prior to the start of the inspection, the institution may be asked to provide certain information to the inspection team.

- The examination phase of an inspection starts with a kick-off meeting. During this phase, the concrete inspection activities are carried out, taking into account the predefined objectives of the inspection.

For fieldwork, various inspection techniques are used, depending on the subject matter of the inspection: (i) observation, verification and analysis of information, (ii) targeted interviews, (iii) walk-through tests, (iv) surveys and/or detailed studies, (v) confirmation of specific data, etc. The shortcomings found during this phase are documented ("audit trail") and form the basis for the findings to be included in the inspection report.

- During the reporting phase, the inspection team translates the shortcomings found into data-based findings. Together with descriptions and a general conclusion, these findings form the core of the inspection report. The report is the formal outcome of the inspection and should be written in as clear, concise and understandable a manner as possible.

It should be noted that:

- The findings are classified according to their actual or potential impact on the institution's financial situation, capital adequacy, internal governance and controls and risk management. Reputational risk is also considered.

- The report includes an overall score reflecting the general assessment at the end of the inspection.
- The draft report is sent to the institution at least a few days before the organisation of an end-of-inspection meeting at which the inspection team presents the results of the inspection.
- The inspected institution may exercise its right to respond both orally during the end-of-inspection meeting and later in writing. The draft report is then finalised by the inspection team, taking into account the response(s) received, and sent to the institution.

Based on the inspection report, recommendations are made. These recommendations are followed up on by the permanent supervision team. This team is also responsible for monitoring the implementation of corrective measures in the framework of an action plan prepared by the inspected institution.

An inspection may lead not only to the conclusion and implementation of an action plan to remedy the shortcomings identified but also to the imposition of supervisory measures (e.g., remediation deadlines or administrative measures) by the Bank, further to the exercise of its disciplinary powers as a supervisory authority.

At the same time but independently of these measures, the Bank's sanctions committee may, following examination by the auditor, impose an administrative fine on the inspected institution.

In 2022, inspections focused primarily on governance, business models and the main risks faced by supervised institutions: credit risk, operational risk (including IT risk), reputational risk, etc. The prevention of money laundering was also a major focus area of inspections in 2022, for all types of supervised institutions.

Banks' internal models also form the object of inspections. The purpose of these inspections is to assess whether the quality of the internal models used by banks to calculate their regulatory requirements complies with the applicable regulations, considering that these models should contribute to better risk management.

Inspections relating to internal models are mainly conducted on site. For the purpose of these inspections, the banks concerned provide files containing all relevant information necessary for the inspectors to study and assess the models.

As the regulations governing internal models are principle-based, the assessment of these models relies largely on inspectors' judgment and on benchmarking with other banks and applicable best practices. This assessment is facilitated by the ECB's guide to internal models, which sets out how the legislation in this area should be interpreted within the SSM.

The assessment methodology also includes a large number of standardised statistical tests conducted according to a methodology developed during the TRIM (targeted review of internal models) project. These tests require the collection of data from the inspected institutions.

In addition to the usual inspection techniques, inspectors often use their own modelling techniques to quantify or approximate errors and simplifications made by banks. Such quantification is important to determine the severity of weaknesses identified and,

consequently, any corrections to be made to the model results.

In 2022, internal model inspections focused on banks' implementation of recent regulatory changes, commonly known as EBA Repair. These regulatory clarifications, set out in a series of EBA guidelines and standards, aim to improve consistency in the assessment of risk parameters estimated by the models, by specifying a series of principles relating to choices previously left to banks' discretion. The natural consequence is that banks have to review a very large number of internal models. Models that are significantly changed must be re-examined by the supervisor.

Banking regulators are also preparing for the supervision of artificial intelligence and machine learning-based models which banks are likely to use in the future (e.g. for outlier detection, default prediction, etc.). To this end, they have further developed their supervisory expectations in this regard.

In addition to this Pillar 1 work, internal model inspectors contribute to other quantitative work, in the context of both traditional inspections and the development of quantitative suptech tools aimed at improving prudential supervision in general.

2. Insurance undertakings

At the beginning of the year under review, the Bank continued to focus on the consequences of the COVID-19 pandemic and the low interest rate environment, which necessitated enhanced monitoring of the financial situation of insurance and reinsurance undertakings subject to its supervision. However, the geopolitical crisis quickly gave rise to new concerns. In this context, the Bank focused on supervised entities' direct exposure to Ukraine and Russia. Cybersecurity was also a priority. Shortly afterwards, the impact of rising interest rates and the subsequent movements on the financial markets were further monitored. The rapid rise in inflation and its impact on the costs of insurance undertakings and on the claims burden in the non-life sector were also points for attention.

In 2022, the Bank also focused on portfolio transfers, outsourcing and record-keeping. In addition, it carried out various cross-sectional studies, including on the adequacy of life and non-life technical provisions and the role of the actuarial function in this area, the preferential rights of insurance creditors, the special register and cyber risks.

2.1 Mapping of the sector

At the end of 2022, the Bank exercised supervision over 72 undertakings. For seven branches of undertakings governed by the law of another EEA member country, this supervision was limited to verifying compliance with the money-laundering legislation.

In the figures, undertakings active as both insurers and reinsurers are only counted once. Two of the companies supervised by the Bank are reinsurance undertakings in the strict sense.[1]

The number of Belgian insurance groups subject to the Bank's supervision remained unchanged at ten. Three of these are international groups, meaning they have holdings in at least one foreign insurance undertaking. The others have holdings only in Belgian insurance undertakings and are therefore national groups.

In 2022, the Bank received various applications for authorisation from niche operators. These operators have clearly defined activities and often wish to carry out insurance activity throughout the European Economic Area.

1 Since 2022, one additional undertaking has been licensed as both an insurer and reinsurer.

Table D.3

Number of undertakings subject to supervision

(end-of-period data)

	2021	2022
Active insurance undertakings	62	62
Insurance undertakings in run-off	0	0
Reinsurance undertakings	31	32
of which:		
Undertakings also operating as insurers	29	30
Undertakings only operating as reinsurers	2	2
Other [1]	8	8
Total	72	72

Source: NBB.
1 Surety companies and regional public transport companies.

Table D.4

Belgian insurance groups subject to the Bank's supervision

Belgian national groups	Belgian international groups
Belfius Assurances	Ageas
Cigna Elmwood Holdings	KBC Assurances
Credimo Holding	Premia Holdings Europe [1]
Fédérale Assurance	
Groupe Patronale	
Securex	
PSH	

Source: NBB.
1 Formerly Navigators Holdings.

Table D.5

Supervisory colleges for insurance undertakings

The Bank is the group's supervisory authority	The Bank is one of the supervisory authorities	
Ageas	Allianz	Allianz Benelux
		Euler Hermes (Allianz Trade)
KBC Assurances	AXA	AXA Belgium
		Inter Partner Assistance
		Yuzzu Assurances
		Crelan
	Assurances du Crédit Mutuel	Partners Assurances
		NELB
	Munich Re	D.A.S.
		Ergo Insurance
		DKV Belgium
	Cigna	Cigna Life Insurance Company of Europe
		Cigna Europe Insurance Company
	NN	NN Insurance Belgium
	Baloise Group	Baloise Belgium
		Euromex
	Monument Re	Monument Assurance Belgium
	Athora	Athora Belgium
	Enstar	Alpha Insurance
	QBE	QBE Europe
	MS&AD	MS Amlin Insurance
	Premia Holdings Europe [1]	Assurances continentales (ASCO)

Source: NBB.
1 Formerly Navigators Holdings.

2.2 Supervision priorities

Technical provisions for non-life insurance

In 2022, the Bank continued the interaction it had started in 2021 with actuarial function holders on the Belgian market, concerning non-life technical provisions. As supervisory activities and analysis of actuarial function reports showed that prudential requirements were not always being met, the Bank organised a virtual workshop on the tasks of the actuarial function and the requirements for the documentation of technical provisions. Following this workshop, it published a communication on the determination of technical provisions under Solvency II.

Technical provisions for life insurance

The quantitative data received from insurance undertakings enabled the Bank to, amongst other things, conduct two new cross-sectional analyses to improve its understanding of the quality of the data and the adequacy of technical provisions.

The first study involved analysing and comparing (over several years) the cash flows from class 21 activities that make up the best estimates reported to the Bank. This work made it possible, on the one hand, to detect certain irregularities in the reported data and, on the other, to identify gaps and shortcomings in the models and assumptions used for the valuation of technical provisions (e.g. the projection of future expenses). Based on these analyses, some companies have already corrected or improved their best estimate calculations, while others will do so in the future.

The second study concerned class 23 insurance liabilities and covered all undertakings under the Bank's supervision that carry out activities in this class. The work mainly related to the valuation of technical provisions and included an analysis of the evolution of a quarterly reviewed profitability index. The analysis not only revealed data quality issues, but also highlighted points of concern and raised questions regarding the valuation of technical provisions and the Solvency Capital Requirement (SCR), e.g. the use of simplifications. These results were communicated to the undertakings concerned.

Portfolio transfers

The number of portfolio transfers has been increasing in recent years. These are often portfolios of closed or low-activity life insurance policies which, on the basis of technical-financial or risk-related or operational considerations (or a combination of these), are transferred to more specialised players on the Belgian market. These insurers have developed a business model aimed at creating value by consolidating "closed" life insurance portfolios.

It is important to note that portfolio transfers must be submitted to the Bank for approval. When assessing such transactions, the Bank pays particular attention to the business model and strategy used by the transferee, as these are relatively new to the Belgian market. The investment policy of the acquiring insurer and the related risk management are particularly important. The operational organisation, in particular the outsourcing of services to external service providers, as well as the IT and migration processes for the transfer are also important issues for the Bank.

Finally, the Bank notes the extensive use of reinsurance, primarily to transfer the market and underwriting risks inherent in the transferred portfolios; it allows these risks to be covered by the capital of the reinsurer(s) concerned. The Bank examines the characteristics of the reinsurance structure (in particular the cession percentage and presence of guarantees) to ensure that Belgian policyholders are sufficiently protected.

Outsourcing

The outsourcing of certain activities by insurance undertakings continued to be a major focus of the Bank's supervision. The reasons why insurance and reinsurance entities resort to outsourcing remain unchanged: (i) greater efficiency (reduced costs), (ii) access to specific expertise not available within the undertaking and to innovative solutions, and/or (iii) a need for flexibility and scalability. Also in 2022, the Bank received a considerable number of notifications for critical or significant outsourcing, mainly in relation to (i) IT infrastructure and (ii) document storage, very often cloud-based.

Special register

In view of the changing macroeconomic environment, which could adversely affect the market value of certain assets, the Bank also reminded insurance undertakings in 2022 of their regulatory obligation to maintain a so-called special register.

The Insurance Supervision Act of 13 March 2016 grants insurance creditors a preferential lien in the event the insurance undertaking enters liquidation (and its contracts are terminated). The special register ensures the effectiveness of this lien, as it obliges the insurance undertaking to identify, from among all its assets, those which cannot be claimed by creditors other than the holders of insurance claims. The assets intended to cover insurance creditors ahead of all others are included by the undertaking in one or more special groupings of assets.

Through its supervisory activities, the Bank ensures, on the one hand, that undertakings maintain a special register in accordance with the required formalities and, on the other hand, that the value of the one or more special groupings of assets is sufficient to cover insurance obligations (such as those arising when insurance contracts are terminated).

Cyber risk

In 2022, the Bank followed up on its study of cyber risk in the Belgian insurance sector. The results of this analysis, which covered both operational and underwriting risk, were communicated to insurance undertakings on 8 December 2021. The findings and shortcomings identified were shared at a workshop on 1 February 2022 and two seminars in September 2022.

BOX 11

Insurance sector stress tests in 2022

In accordance with the Bank's policy on stress tests for insurance and reinsurance undertakings and groups, the insurance sector is subjected to a stress test at least once a year which is aligned, where appropriate, with a European stress test. As no European stress tests were conducted in 2022, the Bank took the initiative of developing a Belgian stress test. This test was carried out at a group of individual insurers which collectively represent a significant share of the Belgian insurance sector. The overall objective was to assess the financial resilience of the sector to the risks to which it is exposed through the underwriting of cyber risk.

The stress test measured the impact of three different underwriting scenarios that could affect the entire sector: a business blackout, a ransomware attack and a cloud outage leading to a tech bubble burst. The first two scenarios consisted solely of a cyber scenario, while the third involved a combination of underwriting risk associated with cyber risk and financial market shocks. The reference date for the exercise was set at 31 December 2021. The average solvency ratio (hereinafter "SCR") of the 12 Belgian companies that took part in the test was 186 % before application of the shocks. The scenarios used form part of the Bank's framework for assessing macroprudential risks and allow the identification of potential weaknesses at the microprudential level. The results of the stress test were published on the Bank's website.[1]

1 https://www.nbb.be/en/financial-oversight/prudential-supervision/areas-responsibility/insurance-or-reinsurance-40.

The scenario of a cloud outage combined with financial shocks had the greatest impact on the solvency of participating companies. After the shocks were applied and the companies had been given an opportunity to take post-shock measures, the average SCR was 117 %. The decrease in the ratio was mainly due to the loss in value of the investment portfolio (particularly bonds and shares) coupled with an increase in the value of technical provisions. The decrease was partially offset by effects related to certain balance sheet assets and liabilities, including the derivative hedging strategies used by some insurance undertakings, which reduced the impact of the shocks.

The various cyber scenarios were found to have a significant impact on cyber insurance products. In addition, they led to large financial losses in other business lines due to so-called silent cyber risk, i.e. the cyber risk that is implicitly covered by insurance or reinsurance undertakings without them being aware of it. In the business blackout scenario, the damage amounted to 87 % of total claims, mainly under fire insurance. In the ransomware and cloud outage scenarios, the damage was highest for cyber and liability insurance offered by companies providing coverage for business interruption and data loss.

It was found that damage due to cyber incidents generally accounted for between 1 000 % and 10 000 % of insurance premiums for cyber coverage. As the volume of cyber insurance remains modest for the time being and having regard to reinsurance, the final impact was limited to 5 % of SCR. However, the impact could be greater at the level of individual undertakings.

In general, it is nevertheless clear that the pricing of premiums does not always guarantee adequate profitability for companies. Furthermore, some insurers do not have access to sufficient reinsurance to cover the most extreme cyber risks. Finally, while risk is mainly determined by the concentration of major IT service providers in the portfolio, not all companies have a detailed view of the most material exposures in their portfolio.

3. Financial market infrastructures and payment services

The geopolitical crisis arising from Russia's invasion of Ukraine had a major impact on financial market infrastructures (FMIs) and payment institutions. A comprehensive overview of the Bank's supervisory activities in this area can be found in the latest Financial Market Infrastructures and Payment Services Report, available on the Bank's website.[1] This report includes more information on, amongst other topics, the importance of digital operational resilience, the regulation of crypto-asset markets (MICA), the tokenisation of securities, and climate and environmental risks.

1 https://www.nbb.be/en/fmi.

3.1 Mapping of the sector

The Bank is responsible for both oversight and prudential supervision of the post-trade and payment services sectors. Oversight focuses on the efficiency and safety of the financial system, while microprudential supervision relates to the safety of the operators providing these services. In cases where the Bank exercises both oversight and prudential supervision, these two activities can be considered complementary. Table D.6 provides an overview of the systems and institutions subject to the Bank's supervision or oversight. In addition to a classification by type of service provided, these institutions are also grouped according to: (a) the role played by the Bank (i.e. prudential supervisor, overseer or both) and (b) the international dimension of the system or institution (i.e. the Bank is the sole authority, there

Table D.6

Mapping of the financial market infrastructures and payment services sector

	International cooperation		
	The Bank acts as lead authority	The Bank participates in the supervision, under the direction of another authority	The Bank acts as the sole authority
Prudential supervision		Custodian bank The Bank of New York Mellon SA/NV (BNYM SA/NV)	Payment service providers (PSP) Payment institutions (PI) Electronic money institutions (ELMI)
Prudential supervision and oversight	Central securities depositories (CSD) Euroclear Belgium International central securities depository (ICSD) Euroclear Bank SA/NV Supporting institution Euroclear SA/NV	Central counterparties (CCP) LCH Ltd (UK), ICE Clear Europe (UK) LCH SA (FR), Eurex Clearing AG (DE), EuroCCP (NL), Keler CCP (HU), CC&G (IT)	Payment processors Worldline SA/NV
Oversight	Critical service providers SWIFT	Other infrastructure TARGET2-Securities (T2S)[1]	CSD NBB-SSS
	Payment systems Mastercard Clearing Management System[2]	Payment systems TARGET2 (T2)[1] CLS	
	Card payment schemes Mastercard Europe[1] Maestro[2]		Card payment schemes Bancontact[1]
			Payment processors[3] Mastercard Europe equensWorldline Worldline SA/NV Worldline Switzerland ltd
			Payment systems Centre for Exchange and Clearing (CEC)[1]

Post-trade infrastructure	Securities clearing	Payments	Payment systems
	Securities settlement		Payment institutions and electronic money institutions
	Custody of securities		Payment processors
Other infrastructures	T2S		Card payment schemes
	SWIFT		

Source : NBB.
1 Peer review in Eurosystem / ESCB.
2 The NBB and the ECB act jointly as lead overseers (authorities responsible for oversight).
3 Only for certain Belgian activities – Act of 24 March 2017 on the oversight of payment processors.

is an international cooperation agreement with the Bank as the main actor or the Bank fills another role).

Belgium has a total of 47 payment institutions and e-money institutions, including European branches. During the year under review, the Bank again received a steady stream of authorisation applications from applicants with different origins, while various other institutions that had recently been authorised disappeared through alliances with

existing market participants. Having regard to the number of announced consolidations, this suggests that the number of institutions may remain stable or even decrease next year.

3.2 Supervision priorities

The geopolitical crisis resulting from Russia's invasion of Ukraine has also had an impact on financial market infrastructures and payment institutions. The Bank is closely monitoring developments in this area. Since Russia's invasion of Ukraine, various countries have adopted sanctions against Russian individuals and entities. FMIs with an international dimension (in terms of both activities and participants) must take into account these sanctions, which also apply to some of their participants. The Russian countermeasures also affect some of their activities in Russia. The impact of such sanctions/countermeasures on central securities depositories (CSD), international central securities depositories (ICSD), depository banks, the retail payments industry and SWIFT is detailed below.

The potential consequences of the risk management measures adopted by FMIs are an important aspect which the Bank monitors in its capacity as a prudential supervisor and overseer. The General Administration of the Treasury of the FPS Finance is responsible for the identification of breaches of the sanctions rules applicable in Belgium, while the Bank monitors the development of procedures, internal controls and adequate risk management by institutions subject to its supervision.

Euroclear Bank, an ICSD established in Belgium, is one such institution. Insofar as it has ties with Russian participants in the Euroclear system and with the Russian securities market, it is obliged to apply the sanctions rules. As some securities positions were frozen due to sanctions, the periodic interest on these securities, as well as the payments due upon maturity, affect the size of Euroclear Bank's balance sheet. The withdrawal of the Russian ruble as a settlement currency in the Euroclear system has also impacted Euroclear Bank.

Customer deposits with the Bank of New York Mellon SA/NV (BNYM SA/NV), the Belgium-based subsidiary of the Bank of New York Mellon SA/NV (headquartered in the United States), had already increased during the COVID-19 pandemic, partly because customers considered BNYM SA/NV a safe haven at the time and partly because a large amount of liquidity was injected into the system through monetary policy instruments. This "safe haven" effect continued in 2022 due to Russia's invasion of Ukraine.

Table D.7

Number of payment institutions and electronic money institutions subject to supervision

(end-of-period data)

	2021	2022
Payment institutions	39	41
Under Belgian law	34	34
Limited status institutions [1]	0	0
Foreign EEA branches	5	7
Electronic money institutions	7	6
Under Belgian law	6	5
Limited status institutions [2]	0	0
Foreign EEA branches	1	1

Source: NBB.

1 Limited status institutions are registered as having limited status in accordance with Article 82 of the Act of 11 March 2018 and are subject to a limited regime.

2 Limited status electronic money institutions are registered as such in accordance with Article 200 of the Act of 11 March 2018 and are subject to a limited regime.

All payment and e-money institutions licensed in Belgium were asked about the application of restrictive measures against Russia in connection with its invasion of Ukraine. Of the 39 institutions, 32 indicated that they had adopted additional measures as a result of the sanctions imposed on Russia. These included regular updates of sanctions lists, identification of Russian and Belarusian customers, suspension of services to and from sanctioned areas, and review and strengthening of cyber security measures. Thus, it appears that institutions have been proactive in implementing and monitoring the sanctions.

As a provider of critical services for the day-to-day messaging of financial institutions and financial market infrastructure, SWIFT excluded ten Russian and four Belarusian financial institutions from its network on 12 and 20 March and 14 June, respectively. This was done after international and multilateral consultation and on the basis of various Council regulations.

In addition, the (digital) operational resilience of both individual institutions and the financial system as a whole was an important priority for the Bank in 2022. Cyber attacks have become a daily reality around the world. The techniques and methods used in such attacks are increasingly sophisticated and robust. The financial sector is a logical target, given the high value it represents. The geopolitical crisis resulting from Russia's invasion of Ukraine has further increased this threat. Thus far, this situation has not led to any major incidents on the Belgian financial market, but increased vigilance is still required by all players.

For more information on digital operational resilience, please see part E below.

E. Digitalisation

Financial services digitalised further in 2022. This trend has allowed consumers, employees and businesses to cope with various challenges, including the COVID-19 pandemic, in recent years. Examples of developments in digitalisation include new business models based on innovative payment solutions, the use of machine/deep learning or the automation of processes by robotics to increase operational efficiency, the refinement of business strategies through artificial intelligence and data analysis, and the use of cloud services for IT infrastructure management and data aggregation. The idea is often to anticipate expected fundamental changes in the structure of the financial services market. The role of financial services and actors is indeed changing significantly on a global scale. Both financial and non-financial services are increasingly using integrated payment, e-commerce and social media platforms and collaborative ecosystems. Innovation is facilitated in particular by the use of modular technologies that allow different financial and non-financial actors to communicate via application programming interfaces (API).

All of these developments have already had a major impact on the risks to financial institutions, consumers, monetary policy and/or financial stability. As digitalisation leads to increased interconnectivity, it is in particular becoming increasingly crucial to ensure the (cyber)security and continuity of underlying systems. There is every reason to believe that the risks inherent in digitalisation will only increase in the foreseeable future.

Against this backdrop, the European Commission has proposed a strategy to foster digital innovation, the creation of a digital single market for financial services and a European financial data space to facilitate access to and the sharing of financial data. The strategy also aims to achieve greater control of the risks brought about by digital innovation. It has led to a series of European legislative initiatives, with which the Bank is closely associated.

Two of these, relating to operational resilience and crypto-assets, are described below. Another regulatory initiative, to define harmonised rules for artificial intelligence, launched in April 2021 by the European Commission, is also examined, along with the Bank's actions in support of the ECB's digital euro project and efforts to map fintech/insurtech developments in supervised institutions and mitigate the cyber and IT risks to which they are exposed.

1. The digital euro

Since the Bank's last annual report, extensive discussions have been held with all parties involved in the design of a digital euro. The main objectives of a digital euro would be to further boost digitalisation and the efficiency of the European economy while enabling strategic autonomy, without creating additional competition for private payment solutions. In October 2021, the Eurosystem launched a 24-month study phase on the digital euro project in order to finalise decision-making on the main design and distribution issues and to develop a prototype.

One of the key decisions taken so far pertains to the transfer mechanism. In particular, it was decided that the Eurosystem will further explore a third-party validated online solution as well as a peer-to-peer offline solution. In the former, transactions take place online and are validated by a trusted authority, while the latter involves transactions conducted between two users through a suitable device (e.g. a smartphone), without an online mode. The time to market for the latter solution is more uncertain due to its dependence

on near-field communication (NFC) technology. It is important that the development of a third-party validated online solution not be delayed should the timely delivery of a peer-to-peer offline solution prove unfeasible.

In recent months, extensive consideration has also been given to what the public considers the most important feature of the digital euro, namely privacy. Initially, it was thought that the current anti-money laundering and privacy protection practices of private-sector digital solutions would be maintained as a baseline scenario. However, it has since been decided that the Eurosystem will explore two additional options that differ from the above solutions, in the interest of privacy protection. These options are selective privacy for low-value online payments and offline functionality that keeps users' balances and transaction data private. Further research is needed to determine how these two options can be implemented, either within the current regulatory framework or through new bespoke regulations. In addition, various technologies are being tested to improve the privacy of the online solution. In any case and in accordance with what has been decided by the ECB Governing Council, the Eurosystem is committed to ensuring the highest possible level of privacy in the regulatory framework.

Finally, the Eurosystem recently took an important step to safeguard financial stability, by exploring tools to control the amount of digital euro in circulation in order to prevent the use thereof for investment purposes. Discussions have been held on both quantitative limits on digital euro holdings by individual users and remuneration-based tools that could be calibrated to discourage digital euro holdings above a certain threshold. Both options will be considered in the design of the digital euro, so that the appropriate tools and parameters can be defined closer to the time of issuance and remain flexible in the future.

At the time of writing, the Eurosystem was still actively engaging with all stakeholders and will continue to do so for the rest of the investigation phase, with a further round of focus groups planned for completion of the prototype. The Eurosystem will decide in autumn 2023 whether to issue a digital euro. If the project receives the green light, it will move towards the realisation phase. This phase is expected to last around three years and will focus on the development and testing of technical solutions and the business arrangements necessary for a digital euro.

2. Fintech

2.1 Prudential treatment of crypto-asset exposures and the draft EU regulation

Draft EU Regulation on Markets in Crypto-Assets (MiCA)

Recent events in the stablecoin markets, such as the TerraUSD debacle and the collapse of the cryptocurrency exchange FTX, have highlighted the importance of consumer protection when it comes to crypto-assets. Some stablecoins, which are linked to the value of official currencies such as the euro, also pose a risk to payment systems or monetary sovereignty if accepted as a means of payment. This justifies a legislative initiative.

The proposal for a Regulation on Markets in Crypto-Assets (MiCA) aims to address these crypto-asset risks. A political agreement was reached on this proposal in June 2022, following interinstitutional negotiations (trilogues) between the European Parliament, the Council and the Commission.

MiCA targets crypto-assets not covered by existing regulations, particularly on financial instruments and electronic money.

This regulation applies to various actors: issuers that offer crypto-assets to the public[1] or that seek admission to trading on a crypto-assets market as well as crypto-asset service providers.

MiCA provides for three distinct frameworks depending on the category of crypto-asset (see table E.1). The first two asset categories consist of stablecoins, which are linked to the value of a currency or other assets. Stablecoins are further divided into e-money tokens and asset-referenced tokens, depending on their reference asset. The third category is a residual category that covers all other crypto-assets. By including this category, the legislature wishes to regulate all crypto-assets.

1 An offer to the public consists of the disclosure of information enabling potential holders to purchase crypto-assets, for example via a website.

Tableau E.1

Crypto-asset categories under MiCA

	Stablecoins		Other crypto-assets
	E-Money Token	Asset-referenced Token	
Reference asset	An official currency	A basket of official currencies or other assets e.g. gold	Do not aim to maintain a stable value relative to a reference asset (e.g. utility tokens)[1]

Source: NBB.
1 The main function of a utility token is to provide future access to a company's goods or services.

The first set of rules applies to parties that offer crypto-assets to the public or that request admission to trading on a crypto-assets market. These are primarily issuers of crypto-assets.

Firstly, issuers are required to apply for a prior authorisation. In the case of e-money tokens, only credit and electronic money institutions will be authorised as issuers. MiCA also contains consumer protection requirements, such as a right of redemption at any time at the market value of the reference asset. To ensure redemption, issuers must establish and maintain a reserve of sufficiently liquid and secure assets. Issuers are also subject to conduct and transparency rules, as well as capital, liquidity, governance and risk management requirements. Finally, the white paper[1] for asset-referenced tokens requires prior approval, while that for e-money tokens requires only prior notification to the competent authorities.

Stricter rules, particularly in terms of capital requirements and liquidity management, apply to issuers of asset-referenced tokens and e-money tokens considered significant in view of the impact they could have on financial stability. For the offering to the public and admission to trading of the third category of crypto-assets (residual assets), the white paper requires only prior notification to the competent authorities. Persons offering such assets to the public are also subject to rules of conduct and other specific obligations.

1 The white paper is a document drafted and published by and under the responsibility of the issuer, containing the key information required to be published in accordance with MiCA (relating to the issuer, the project, the type of asset and the rights to the asset and the technology) in order to allow potential purchasers of the crypto-asset to make informed decisions.

The second set of rules relates to providers of crypto-asset services such as crypto-asset custody, operation of a trading platform and order execution. Such providers are subject to prior authorisation or prior notification in the case of certain institutions – such as credit institutions – that are already subject to a prudential framework. These rules apply in full to service providers of crypto-assets for which the issuer is difficult or impossible to identify, such as Bitcoin.

MiCA will be applicable 18 months after its entry into force, except for the provisions related to asset-referenced tokens and e-money tokens, which will apply 12 months after the entry into force.

Prudential treatment of crypto-asset exposures by the Basel Committee on Banking Supervision (BCBS)

Although banks currently have limited exposure to crypto-assets, the continued growth of and innovation on the markets for crypto-assets and services are generating increasing interest from the banking sector. This development could pose new risks to financial stability and the banking system.

Against this backdrop, the BCBS approved in December 2022 a standard on the prudential treatment of banks' exposures to crypto-assets. This standard, which was preceded by two public consultations in 2021 and 2022, classifies such exposures into two groups, based on certain characteristics of the crypto-assets involved (see chart E.1):

- The first group includes assets deemed eligible for treatment under the existing Basel framework, subject to certain modifications and additional guidance. This group is further divided into two sub-groups: tokenised traditional assets[1] (Group 1a) and stablecoins[2] (Group 1b). To qualify for this group, assets must meet conditions regarding *inter alia* (1) the legal framework for the rights and obligations arising from the asset, (2) the transferability and settlement finality of transactions involving the asset, and (3) the identification, regulation, supervision or risk management framework of players that form part of the asset's ecosystem (those that provide redemptions, transfers, validation of transactions, investment of the asset reserve, etc.). For stablecoins, it is required that the issuer be regulated and supervised and subject to prudential capital and liquidity requirements and that the stabilisation mechanism be robust.

  In general, assets in the first group will be subject to capital requirements based on the weighted risks of the underlying exposures under the Basel framework. If the technological infrastructure of the asset in question presents specific weaknesses, an additional risk-weighted asset (RWA) requirement will be applied to cover the risks inherent in it.

- The second group consists of assets that do not meet all conditions to qualify for the first group. These assets are also divided into two subgroups and will in principle be subject to new conservative prudential treatment (Group 2b) consisting of the application of a risk weight of 1 250 % to the greater of the absolute value of the aggregate long positions and the absolute value of the aggregate short positions in the crypto-asset. However, the standard proposes to recognise hedging for selected crypto-assets in the second group that meet certain criteria (Group 2a). Exposures to these assets (and related derivatives) will be subject to a modified version of the standard or simplified standard approach to market risk.

- Finally, exposures to assets in the second group are limited to 1 % of Tier 1 capital. If this limit is exceeded, the amount in excess of 1 % will be subject to the more conservative Group 2b capital requirements. Moreover, if the exposure exceeds 2 % of Tier 1 capital, the full exposure will be subject to the Group 2b requirements.

- Other requirements (related to operational risk, liquidity risk, leverage ratio, large exposures, etc.) apply to all categories of crypto-assets.

The proposed treatment is summarised below.

One of the most contentious issues in the consultation responses was the eligibility of stablecoins for the first group of crypto-assets. It was proposed that crypto-assets be required to pass two tests in order to qualify for this group.

- The first test aims to ensure that the asset can be redeemed at any time at the market value of the reference asset. This test includes a series of conditions related to the type of stabilisation mechanism and the guarantees it provides. In particular, the mechanism must be supported by a sufficiently large asset reserve. This test was retained in the standard ultimately adopted.

- A second test aimed to ensure that the holder could sell the asset on the market at a price close to the market value of the reference asset. This test set a tolerance limit for the deviation of the market value of the asset from the market value of the reference asset, measured over a 12-month period. The intention was to supplement the first test with an assessment of the likelihood of the asset being repurchased at the market value of the reference asset. This test was abandoned, but the possibility of developing statistical tests to identify low-risk stablecoins will be revisited by the end of 2023.

A second point for discussion was whether so-called "permissionless"[3] assets are eligible for Group 1. Such assets will be excluded from Group 1, but this status will be reassessed by the end of 2023.

The standard will apply as from 1 January 2025.

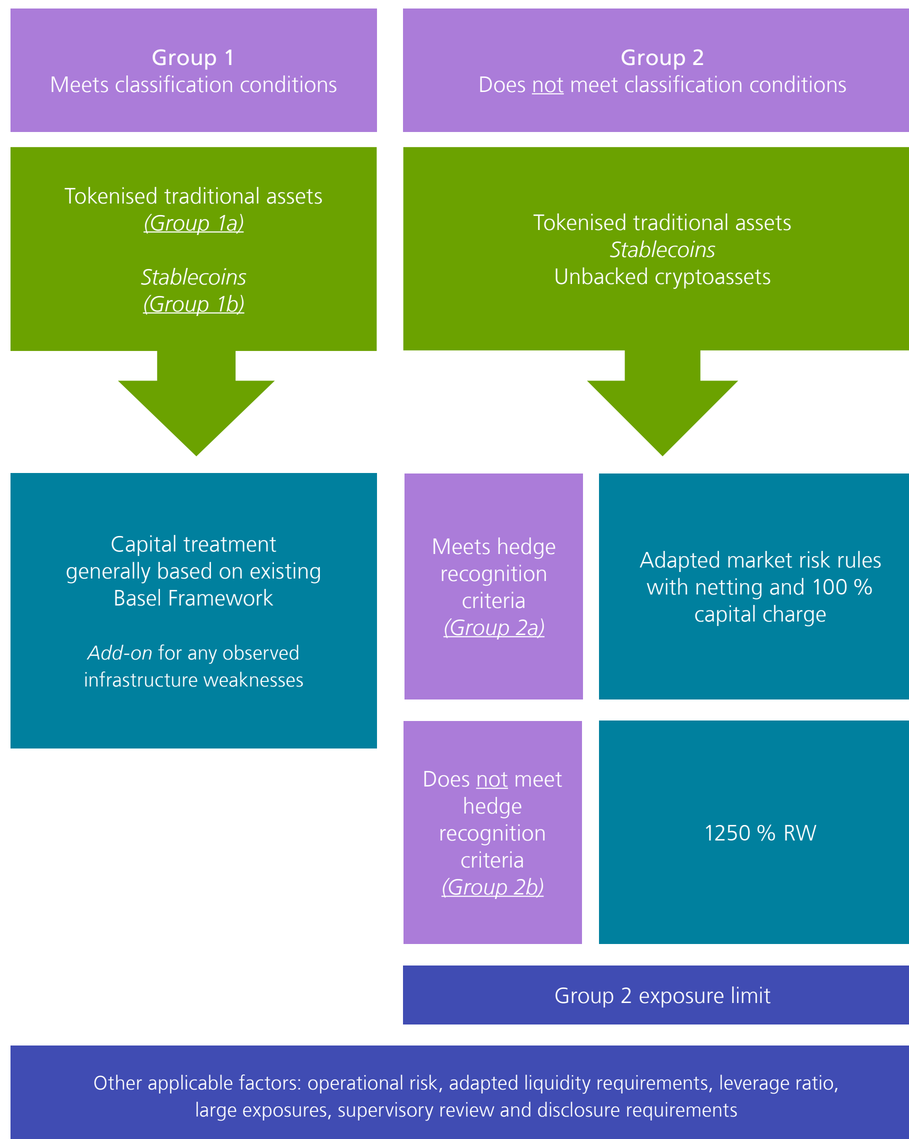
1 Tokenised traditional assets are digital representations of traditional financial assets acquired through cryptography, distributed ledger technology (DLT) or similar technology that records ownership of the assets.

2 Stablecoins are crypto-assets that aim to maintain a stable value relative to a specific asset or a pool or basket of assets.

3 In distributed ledger technology, the term "permissionless" refers to a particular configuration of this technology in which users and nodes (i.e. computers that host a copy of the ledger and participate in the recording of transactions) do not need to be authenticated or authorised.

Chart E.1

Structure of the prudential treatment of crypto-asset exposures (Basel Committee on Banking Supervision) [1]



Source: BCBS.
1 Prudential treatment of crypto-asset exposures (December 2022).

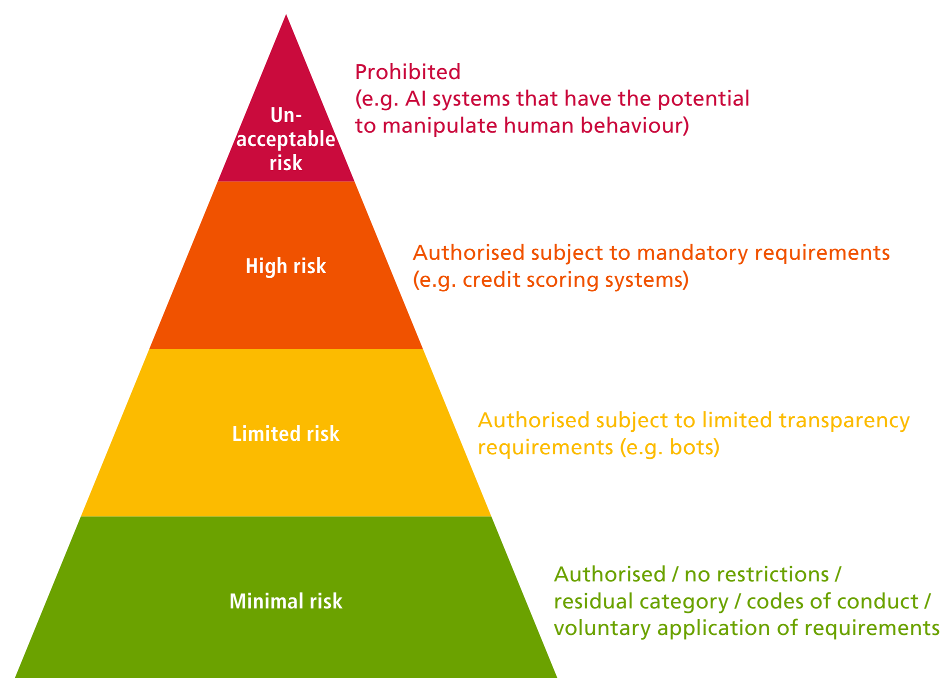
2.2 Regulation on artificial intelligence

Regulation on artificial intelligence (AI) and the impact thereof on institutions providing credit rating systems and certain life and health insurance systems

On 21 April 2021, the European Commission published a proposal for a regulation laying down harmonised rules on AI in order to safeguard fundamental rights while fostering innovation. This regulation concerns the development, marketing and use of AI systems in the Union and follows a proportionate, risk-based approach, ranging from a total ban to voluntary application of requirements (see chart E.2): (1) AI systems that pose an unacceptable risk (such as those that have the potential to manipulate human behaviour) are prohibited;

Chart E.2

Proposal for a regulation on artificial intelligence, risk-based approach[1]



Source: NBB.
1 See also https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai.

(2) so-called high-risk AI systems that pose a significant risk to fundamental rights are subject to strict requirements, which will be further specified in harmonised standards; (3) certain systems that pose more limited risk (emotion recognition systems, systems interacting with humans) are subject to limited transparency obligations aimed at informing human users that they are interacting with an AI system; (4) other systems deemed to pose minimal risk are not subject to mandatory requirements, but the creation of codes of conduct aimed at encouraging the voluntary application of the requirements applicable to high-risk AI systems is facilitated and encouraged.

In November 2022, the Council adopted a general approach and initiated inter-institutional negotiations (trilogues) between the European Parliament, the Council and the Commission. The risk-based approach was hereby confirmed. Potentially high-risk systems are listed in an annex. They include (1) AI systems used to evaluate the credit score or creditworthiness of natural persons and (2) AI systems used for risk assessment and pricing, for natural persons, in life and health insurance products. All AI systems listed in this annex are considered high-risk unless their output plays a purely accessory role in the human decision-making or action in which they are used.

Like the Commission's proposal, the general approach aims to introduce a preventive system that relies primarily on (1) the use of conformity assessment procedures by AI system providers and (2) the monitoring of these procedures. An AI system provider falls under the proposed rules if it develops an AI system or has an AI system developed and places it on the market or puts it into service under its own name or under a registered trademark.

Providers of high-risk AI systems will be subject to additional obligations, such as the introduction of a risk management system, appropriate governance practices, data management and human oversight to allow the user to decide not to use or to discontinue the system.

2.3 Fintech survey and analysis for credit institutions

In 2017, the Bank launched a survey on fintech and digitalisation covering selected banks and financial institutions. This survey provided a general picture of the impact of fintech on the Belgian financial sector and facilitated the launch of a dialogue with market players on various digital themes. The analysis of the survey responses was communicated to the participants and the public in 2018, together with a range of best practices concerning governance, organisation and monitoring in regard to fintech and digitalisation.

In view of technological and market developments, a new survey was conducted by the Bank in 2020, the results of which were communicated to banks in 2021 and released in a public report in 2022.[1] The report revealed that banks had generally made progress in their digital transition, but that the speed of this transition varied across the Belgian banking sector.

Around the same time as the Belgian survey, the European Central Bank took initiatives on digitalisation and fintech within the SSM. The supervisory and risk assessment priorities of the SSM for 2022-2024 include addressing structural weaknesses in business models via effective digitalisation strategies and enhanced governance. In this context, the ECB has been working together with the European national supervisory authorities (including the Bank) to improve its market intelligence. As a first step, it held an industry consultation on digital transformation and the use of fintech. In a second stage, it launched a broader survey on these topics amongst significant credit institutions in the summer of 2022, which allowed it to collect information that was not available in a consistent and coordinated way within the SSM. The results of this survey will be instrumental in (i) setting prudential priorities, (ii) identifying issues requiring further assessment, and (iii) developing guidance for SSM supervisors to assess risks and setting prudential expectations for banks. The main findings are also relevant for shaping the SREP methodology on business models and governance for the use of new technologies.

1 bfw-digitaal-editie2-2022-03-artikel-begassededhaem-mention-romont.pdf (financialforum.be).

2.4 Insurtech survey and analysis of insurance undertakings

Technological innovation is increasingly impacting the business model of insurance undertakings. The rapid pace of change brought about by technological innovation creates opportunities for both start-ups and established technology companies to provide financial services and also allows traditional insurers to adapt and improve their business models, services and products. However, these new trends can also create or reinforce certain risks.

In order to gain a better understanding of this evolving landscape and the current state of play in this field, the Bank carried out a survey of insurance undertakings. The first objective of the survey was to get a picture of insurers' vision and strategy with regard to insurtech and digitalisation. Companies indicated that digitalisation had increased operational efficiency and customer satisfaction, but that the race for talent made it difficult to pursue innovation.

Companies were then asked to provide a detailed overview of the technologies they are using or developing. The responses showed that companies clearly rely on mainstream technologies, such as the cloud. They also make extensive use of more innovative technologies, such as artificial intelligence and ecosystems. It was also found that digitalisation is present in virtually all aspects of the value chain, but mainly in distribution or underwriting and claims management. The analysis further revealed that innovation was mainly concentrated in non-life lines of business, including motor vehicle and fire insurance.
Finally, when asked about the risks associated with innovative digitalisation, insurance undertakings reported increased cyber risk and operational risk. They indicated that, in some cases, profitability was also affected, but that they were taking the necessary steps to manage these risks.

3. Digital operational resilience

3.1 Cyber and IT risks

In terms of cyber and IT risks, 2022 was still characterised to some extent by the effects of the COVID-19 pandemic. However, the challenges associated with this event, such as massive recourse to home working, more limited physical presence of operators, specific attack patterns, etc., have been adequately dealt with in the financial sector. The solutions adopted now form part of the "new normal".

The financial sector's exposure to these threats increased following Russia's invasion of Ukraine. In February 2022, the geopolitical conflict in Eastern Europe took a major turn following Russia's invasion of Ukraine. In light of the extensive Western support for Ukraine and the European sanctions policy towards Russia, the likelihood of European countries, and Belgium in particular due to the presence of important international institutions and market infrastructure, being targeted for cyber attacks by either nation-state related groups or so-called "hacktivists" increased sharply. Scenarios in which hackers unintentionally cause collateral damage cannot be ruled out, nor can attacks on critical non-financial infrastructure (telecommunications, energy, etc.), which could have a significant impact on the financial sector. Since the escalation of the geopolitical conflict, the Bank and the financial sector as a whole have demonstrated an increased level of preparedness. Fortunately, thanks to various precautionary measures, this concrete threat did not result in any serious operational incidents during the year under review.

In any case, cyber attacks have already become a daily reality around the world in recent years. Likewise, attackers are continuing to refine the techniques and methods used, making some attacks even more sophisticated, powerful and/or larger in scale. The number of targeted, long-lasting cyber attacks is therefore likely to increase in the future, with the financial sector remaining a potential target. The Carnegie Endowment for International Peace[1] prepares a list of cyber attacks on financial institutions worldwide. This document reveals the current state of cyber threats to the sector. In 2022, reported cyber attacks included the theft of sensitive data, the disruption of systems and the initiation of fraudulent transactions. Reported cases often involved the use of ransomware, distributed denial of service (DDoS) attacks and the exploitation of institutional vulnerabilities, including in supply chains and/or employee gullibility.

1 Timeline of Cyber Incidents Involving Financial Institutions – Carnegie Endowment for International Peace.

Companies and insurance or reinsurance groups are vulnerable to cyber risk on two fronts: on the one hand, they are exposed to cyber attacks as institutions and, on the other hand, they are affected by attacks on their clients, through explicit cover (affirmative cyber insurance) or implicit cover (silent insurance or non-affirmative cyber insurance). Given the increase in the number of cyber attacks during the pandemic and greater public awareness of this possibility, the Bank expects the cyber insurance market to grow rapidly.

In addition to cyber risks, the clear dependence on IT solutions in the financial sector also entails other challenges. Under pressure from innovative actors, increasing customer expectations of services and their availability and increasing (security) risks – for example due to the use of obsolete software which is no longer supported – traditional institutions are being urged to renew their sometimes very old IT architecture in a relatively short time span. However, due to the complexity of their IT environment, it is a challenge to achieve this objective in a responsible manner. There is also a significant risk of increasing dependence on third parties for IT services and other standardised IT system components. In particular, cloud solutions are increasingly being used for ever more important processes. The limited number of critical service providers leads to a growing concentration risk for the financial sector. The potential impact of geopolitical tensions on supply chains has also become very clear in recent years. The need to test software and business recovery solutions sufficiently extensively to cover a range of extreme but plausible scenarios also remains an important focus area.

It is therefore important that the management bodies of financial actors possess the necessary expertise and information to monitor risks appropriately and that they incorporate adequate measures into their strategic planning to keep risks within acceptable limits. However, many institutions report difficulties recruiting staff with the required skills and expertise. Furthermore, all staff of such institutions need to be aware of cyber and IT risks, understand how these can arise and how to react to them.

3.2 Legislative guidelines and developments

In recent years, the Bank has contributed significantly to a regulatory framework aimed at better controlling cyber and IT risks. The circular on the Bank's expectations for the business continuity and security of systemically important institutions remains an important reference. The Bank is also actively contributing to the development of a European regulatory framework for cyber and IT risk management under the auspices of the EBA. This has led to the publication of guidelines for supervisors on ICT risk assessment in the context of the SREP, guidelines on outsourcing, and guidelines on ICT risk and security management. Under the aegis of EIOPA, a comparable regulatory framework has been put in place for the insurance sector in the form of guidelines on outsourcing to cloud service providers and guidelines on ICT security and governance. These guidelines have in the meantime all been incorporated into the Bank's supervision and policy framework. For payment systems and market infrastructure, the ECB's oversight expectations regarding cyber resilience serve as a benchmark. There have also been important developments at the global level. In March 2021, the Basel Committee published new principles to strengthen the operational resilience of banks. One of these principles concerns ICT and cyber security. It goes without saying that these principles are also highly relevant in a digital context.

At the end of 2022, the European Parliament approved a proposal for a regulation on digital operational resilience, called the Digital Operational Resilience Act (DORA). This regulation aims to mitigate the risks associated with the digital transformation of the financial sector by imposing strict common rules on ICT governance and risk management, ICT incident reporting and information sharing, security testing as well as the risk associated with the provision of ICT services by third parties. These rules apply to a wide range of financial institutions as well as to third-party providers of critical ICT services, e.g. cloud service providers, which will be subject to some type of oversight. During the discussions on the draft texts at European level, the Bank played a significant advisory role within the Belgian delegation. It will actively contribute to development of the technical standards that will give shape to the regulation.

Finally, the European Systemic Risk Board published recommendations in early 2022 to create a pan-European framework for the coordination of systemic cyber security incidents. The Bank is also closely involved in the development of these recommendations.

3.3 Operational activities

Assessing and promoting the control of cyber and IT risks is a top priority for the Bank. Cooperation at European and international levels is becoming increasingly important in this regard. In this area, the Bank focuses on the security of and confidence in financial institutions and FMIs, as well as on cross-sectoral strategies to address these risks.

The Bank has adopted a two-pronged approach. On the one hand, institutions that are subject to prudential supervision are required to hold adequate capital to cover their operational risks, which include cyber and IT risks. On the other hand, the operational security and robustness of critical processes of financial institutions and FMIs are closely monitored. The availability, integrity and confidentiality of IT systems and data are important factors in this respect. The Bank carried out several inspections in 2022 (for banks in the context of the SSM) to verify compliance with the regulatory framework and the adequate management of IT systems having regard to cyber and IT risks.

In addition, the Bank monitors these risks in financial institutions and FMIs as part of its ongoing and recurring supervisory activities. In view of the heightened cyber threat resulting from Russia's invasion of Ukraine, the Bank decided in March 2022 to issue several communications to raise awareness of the cyber threat posed by the crisis to the institutions subject to its supervision and to encourage them to improve their operational preparedness. In addition, selected key institutions were invited to complete a short survey. The responses were supplemented by follow-up sessions with the participants. After a thorough analysis of the various responses, the Bank concluded that the sector was generally well informed of the heightened threat level and that it had responded appropriately.

In 2018, the Bank set up a programme for ethical hacking, called TIBER-BE (*Threat Intelligence-Based Ethical Red Teaming Belgium*). The Belgian part of a methodology developed by the Eurosystem, this programme aims, through sophisticated testing, to increase the cyber resilience of financial institutions and FMIs and to provide feedback on the cyber security of the Belgian financial sector as a whole. The Bank encourages these exercises in its capacity as the authority responsible for ensuring financial stability. In 2022, the TIBER-BE framework was updated on the basis of test results and several additional institutions joined. The sector appears convinced of the methodology and added value of these tests.

The Bank is also paying increasing attention to sector-level initiatives. Thus, the SSM regularly conducts cross-sectoral analyses of IT and cyber-related topics. In 2022, for example, all major banks and some smaller banks were asked to complete a questionnaire intended to provide important information for the annual Supervisory Review and Evaluation Process (SREP) on IT aspects and to enable cross-sectoral analyses to be conducted. A large number of insurance undertakings, stockbroking firms, payment institutions and electronic money institutions were also asked to provide the same type of information for a similar purpose.

Also in 2022, a survey was conducted for the first time of selected financial institutions to establish a list of critical third parties that provide them with information and communication technology services. This was a follow-up to an initiative by the European Supervisory Authorities (ESAs), which aimed to get an idea of which third parties could in future qualify as critical service providers under DORA.

In its capacity as the sectoral authority for the application of the law on the security and protection of critical infrastructure (mainly banks and FMIs of systemic importance), the Bank also assesses the effectiveness of control systems in critical financial infrastructure. In this framework it organises and coordinates periodic sector-level crisis simulation exercises, in order to prepare the Belgian financial sector for possible operational incidents of a systemic nature. Under the Networks and Information Systems Security (NIS) Act, the Bank acts as a contact point for major incidents in the sector.

Finally, the Bank participates in various international fora and working groups to better understand the risks that could become systemic for the financial sector and to study mitigation measures. Other initiatives aim to promote the exchange of information between institutions, supervisors, central banks, etc.

F. Resolution

While the banking sector has withstood the crises and shocks of recent years relatively well and continues to fulfil its role of financing the economy, significant changes in the macroeconomic environment and the associated uncertainties have made it more necessary than ever to strengthen the second pillar of the banking union so as to be able to resolve potential crises affecting a European banking group in an orderly manner. The resolution of the Slovenian and Croatian subsidiaries of the Sberbank group in February 2022 demonstrated that the resolution framework is both robust and sufficiently flexible to deal effectively with the failure of a small group. However, it is important not to rest on this success and to continue to develop the resolution framework further, to ensure that it can cope with more complex resolution cases.

Developments are mainly focused in three areas. First, during the year under review, legislative changes were initiated or finalised to strengthen the resolution framework. To this end, lessons were drawn from the first years of application of the framework, and its scope was extended from credit institutions and investment firms to other financial actors such as central counterparties and insurance and reinsurance undertakings. Second and in parallel, the resolution authorities of the banking union defined, under the auspices of the Single Resolution Board (SRB), a programme to be followed by each European banking group in order to achieve a minimum level of resolvability by the end of 2023. Finally, 2023 is also the last year of the transition period for the establishment of the Single Resolution Fund. These projects and achievements demonstrate the progress that has already been made, but highlight the work

that remains to be done to ensure the resolvability of the European financial sector.

1. Statutory and regulatory framework

1.1 Credit institutions and stockbroking firms

Resolution framework

After several months of negotiations, Eurogroup finance ministers agreed in June 2022 on a plan for the future of the banking union. While the creation of the banking union in 2014 was a powerful response to the financial crisis, it remains incomplete to date. Recognising this, the Eurogroup decided, as a first step towards final completion of the banking union, to strengthen the framework for crisis management and national deposit guarantee schemes. This first step includes four main elements.

First, the public interest assessment should be clarified and harmonised across the European Union. The public interest assessment determines whether an institution that is failing or likely to fail can be exempted from the normal insolvency proceedings by applying resolution tools. Although the Bank Recovery and Resolution Directive (BRRD)[1] sets out the main factors to be considered by resolution authorities when carrying out this assessment, it was found that resolution authorities across the EU are applying differing practices. Consequently, it is necessary to further clarify and harmonise this assessment so that similar credit institutions are treated in a consistent manner across the EU.

Secondly, some of the clarifications to be made to the public interest assessment should lead to a broader application of resolution tools, including to smaller and medium-sized banks. Such broadening is desirable, as it will allow the failure of a larger number of credit institutions to be resolved within the existing banking union framework, led by the SRB. However, this raises the question of how resolution should be financed. The Eurogroup has identified two possible sources of funding, namely credit institutions' own resources, through the Minimum Requirement for Own Funds and Eligible Liabilities (MREL), and industry resources, such as industry-funded schemes.

Thirdly, the Eurogroup calls for harmonisation of the use of national deposit guarantee schemes in the event of a crisis. Currently, the Deposit Guarantee Schemes Directive (DGSD)[2] allows Member States to authorise their national deposit guarantee schemes to intervene pre-emptively to prevent the failure of a credit institution, provided that such intervention would not be more costly than paying out deposits. A number of Member States, including Belgium, have not made use of this option, which means such intervention is not possible in every Member State. The aim of harmonisation is to make such intervention more consistent, credible and predictable.

The fourth element identified by the Eurogroup concerns the harmonisation of certain features of national insolvency regimes, to make them more consistent with the principles of the resolution framework. In particular, the ranking of deposits in the hierarchy of creditors should be harmonised.

The above aspects should be implemented through amendments to the BRRD and the DGSD, for which the European Commission will present a proposal in the first quarter of 2023.

As regards implementation of the resolution framework, the EBA published new guidelines on improving resolvability in January 2022.[3] These guidelines, which apply to both institutions and resolution authorities, cover operational continuity, access to financial market infrastructures, funding and liquidity in resolution, bail-in execution, business reorganisation and communication. The EBA guidelines, which will enter into force on 1 January 2024, were transposed by the Bank in its circular on the EBA guidelines on crisis management.[4]

1 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012 of the European Parliament and of the Council.

2 Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes.

3 Guidelines EBA/GL/2022/01 of 13 January 2022 on improving resolvability for institutions and resolution authorities.

4 Circular NBB_2022_11 – EBA guidelines on crisis management.

MREL

In 2022, work continued on the gradual implementation of the MREL framework introduced by the BRRD2,[1] with which credit institutions must comply fully from 1 January 2024. However, the European legislature also wished to clarify certain details of this framework during the year under review, by means of a regulation.[2] This regulation provides two clarifications, mainly related to the CRR.[3] The first clarification concerns the calculation of the total loss absorbing capacity (TLAC) of global systemically important institutions. For instruments issued by subsidiaries that do not belong to the same resolution group as the resolution entity, a distinction will be made between issuances governed by the law of a country that has a legally enforceable resolution framework and those governed by the law of a third country with no such framework. The second clarification concerns the treatment of instruments eligible for internal MREL that are indirectly subscribed by the resolution entity, where both the resolution entity and the subsidiary through which the subscription takes place belong to the same resolution group. From 2024 onwards, these instruments must be deducted from the stock of internal MREL eligible instruments of the subsidiary that subscribed to them. This deduction ensures that the same internal MREL eligible instruments are not used by multiple entities in a resolution group to comply with the MREL.

It is important that the internal MREL of systemically important subsidiaries be calibrated with a buffer to ensure market confidence. While eliminating the double counting of internal MREL eligible instruments is crucial for the implementation of single point of entry (SPE) strategies, it is also essential that internal MREL is calibrated correctly. Indeed, under-calibration of this requirement could jeopardise the implementation of the SPE strategy, by preventing the full flow of losses from the subsidiary to its parent company. Conversely, over-calibration could be viewed as a source of inefficiency. In this context, the Bank considers it important that the internal MREL of subsidiaries qualified as systemically important be calibrated with a buffer to ensure market confidence, in line with the BRRD. This is not necessarily allowed in the SRB's MREL policy.

Furthermore, to strengthen the credibility of the SPE strategy, the SRB launched a project during the year under review to test the strategy and identify potential obstacles to its implementation. Although the SPE strategy is explicitly set out in the statutory resolution framework, there is a possibility that it could favour a group over its constituent legal entities. As a result, the strategy could conflict with legal principles on preserving the corporate interest of the companies forming a group or with the principle that no creditor should incur more losses than it would have to bear in the event of liquidation under normal insolvency proceedings, taking into account that liquidation also occurs at the level of individual legal entities. The SRB's project is not only crucial for the Single Resolution Mechanism (SRM), given that the SPE strategy is the resolution strategy applied to 80 % of banking groups under the SRB's jurisdiction, but also essential for the Belgian banking sector, which includes several European banking groups operating via subsidiaries.

Finally, since the entry into force of the second Single Resolution Mechanism Regulation (SRMR2)[4] at the end of 2020, the Bank has the possibility to ask the SRB to apply the MREL regime for top-tier institutions to certain non-top tier resolution entities (the fishing option). During the year under review, the Bank informed the industry, through a circular issued by its Resolution Board,[5] of the latter's methodology and the assessment criteria it systematically considers and applies each time it makes use of this option. In particular, the circular describes how the Resolution Board has so far assessed whether an institution meets the conditions to exercise the fishing option and how it assesses the proportionality of its decisions in this regard.

1 Directive (EU) 2019/879 of the European Parliament and of the Council of 20 May 2019 amending Directive 2014/59/EU as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms and Directive 98/26/EC (BRRD2).

2 Regulation (EU) 2022/2036 of the European Parliament and of the Council of 19 October 2022 amending Regulation (EU) No 575/2013 and Directive 2014/59/EU as regards the prudential treatment of global systemically important institutions with a multiple-point-of-entry resolution strategy and methods for the indirect subscription of instruments eligible for meeting the minimum requirement for own funds and eligible liabilities.

3 Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.

4 Regulation (EU) 2019/877 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 806/2014 as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms.

5 Circular of the Resolution College of the National Bank of Belgium of 19 September 2022 specifying the methodology followed and assessment criteria considered when deciding whether to apply the MREL for top-tier institutions to a non-top tier institution.

1.2 Insurance and reinsurance undertakings

The year under review saw further negotiations on the European Commission's Proposal for a Directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of insurance and reinsurance undertakings (hereinafter referred to as the IRRD proposal).[1] The proposal does not cover two issues which the Bank considers important: the need for a financing mechanism and the arrangements for cooperation between authorities in cases involving financial conglomerates.

The IRRD proposal does not include an obligation to establish a resolution fund. However, where one or more resolution instruments are applied, it is required to ensure that shareholders and/or creditors that would incur losses greater than those they would have incurred had the company been wound up under normal insolvency procedures be compensated. In order to comply with this obligation and to ensure a level playing field between the Member States, the Bank considers it important to include in the IRRD proposal an obligation to establish a funding mechanism.

Furthermore, the IRRD proposal does not pay particular attention to financial conglomerates. The BRRD, together with the SRMR, sets out a resolution framework for credit institutions and investment firms, while the IRRD proposal details a framework modelled on it for (re)insurers. The Bank is of the opinion that the potential impact of the coexistence of these two frameworks on the resolution of credit institutions, investment firms and/or (re)insurers that form part of financial conglomerates should be addressed without delay. Strong but balanced consistency between the two frameworks should be ensured from the outset. To this end, a number of guiding principles could be included in the IRRD proposal. For example, the respective resolution authorities of (re)insurers, on the one hand, and credit institutions and investment firms, on the other, should have autonomous decision-making powers to be exercised on equal footing and should cooperate in good faith. They should also exchange all relevant information necessary for the performance of their respective tasks. To this end, they could, for example, be granted observer status in resolution colleges. Finally, the functioning of the resolution framework should be reassessed after some time. To this end, the proposal should include a review clause.

1 Proposal for a Directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of insurance and reinsurance undertakings and amending Directives 2002/47/EC, 2004/25/EC, 2009/138/EC (EU), 2017/1132 and Regulations (EU) No 1094/2010 and (EU) No 648/2012, see also section 1.3 of part E "Resolution" of the 2021 annual report.

BOX 12

Resolution of Sberbank Europe AG

The crisis that affected the European branch of the Russian Sberbank group, in the wake of the sanctions imposed in response to Russia's invasion of Ukraine, was a further test of the resolution rules applicable at European level. Several of the group's institutions were subject to resolution proceedings in the course of 2022.

The Sberbank group, which has a Russian parent company, was present in Europe through its Austrian subsidiary, Sberbank Europe AG, which acted as the parent company for the group's European branches. Sberbank Europe AG (with a balance sheet total of € 3.6 billion on an individual basis) operated in Germany through a branch office and had seven subsidiaries, four of which were located in the EU,

specifically in Slovenia (balance sheet total of € 1.8 billion), Croatia (balance sheet total of € 1.5 billion), Hungary (balance sheet total of € 1.4 billion) and the Czech Republic (balance sheet total of € 3.4 billion). Of the remaining three subsidiaries, two were located in Bosnia (balance sheet total of € 0.8 and € 0.5 billion) and one in Serbia (balance sheet total of € 1.3 billion).

As a result of the intensification of geopolitical tensions between Russia and Ukraine starting in November 2021 and culminating in Russia's invasion of Ukraine on 24 February 2022, the European Union and the United States announced sanctions against Russia. These sanctions and the resulting reputational damage had an immediate impact on the liquidity of the European operations of the Sberbank group.

On 27 February 2022, having regard to the precariousness of their liquidity position, the ECB deemed the Austrian parent company and its Croatian and Slovenian subsidiaries failing or likely to fail. That same day, the three institutions were placed under a moratorium by the competent resolution authorities further to the instructions of the SRB. The moratorium, which involved the suspension of certain contractual obligations for a period of up to two working days, was intended to allow the SRB to assess whether resolution actions against the three institutions were required in the public interest and, if so, to choose the most appropriate resolution tool and prepare for its implementation.

On 1 March 2022, the SRB decided that the Austrian parent company did not meet the public interest test and that it should therefore be liquidated in accordance with the normal national insolvency procedure. As regards the Croatian and Slovenian subsidiaries, the SRB found that they did meet the public interest test. Both subsidiaries were thus resolved by means of the sale of business tool, pursuant to which they were transferred to the Hrvatska Postanska Banka in Croatia and the Nova Ljubljanska Banka in Slovenia, respectively. As regards the Hungarian and Czech subsidiaries, the competent national resolution authorities considered that they did not meet the public interest test. These institutions therefore also had to be liquidated under the normal national insolvency regimes.

This approach deviated from the resolution strategy foreseen in the Sberbank group's resolution plan which provided for the application of the bail-in tool at the level of the Austrian parent company and was therefore based on a single point of entry (SPE) resolution strategy. However, as the SPE strategy was insufficient to contain the rapidly spreading liquidity crisis, the SRB was forced to derogate from it and to take resolution actions at the level of the Slovenian and Croatian subsidiaries. The SRB thus applied a multiple point of entry (MPE) resolution strategy.[1]

The approach adopted in the context of the management of the Sberbank group's liquidity crisis demonstrates that the strategy set out in the resolution plan remains indicative and leaves room to take into account the concrete circumstances of an effective crisis. For these reasons, the Bank considers it important to carefully examine the intrinsic limitations of the SPE strategy, from both a legal and operational perspective. It is imperative that these limitations are taken into account in the resolution planning phase so that options can be kept open, insofar as possible, in the event of an effective crisis.

1 See Recital (4) to the BRRD2: "In the single entry point resolution strategy, only one entity of the group (typically the parent undertaking) is subject to resolution proceedings. Other group entities (typically operating subsidiaries) are not placed in resolution, but transfer their losses and recapitalisation needs to the entity to be resolved. In the multiple entry point resolution strategy, several entities in the group could be subject to resolution."

2. Resolvability of credit institutions and stockbroking firms

2.1 Institutions falling directly under the Bank's authority

As a resolution authority, the Bank is directly responsible for less significant institutions (LSIs). The Bank draws up resolution plans for these institutions, on which MREL decisions are based after a decision by the Bank's Resolution Board. In 2022, the Bank adopted two formal MREL decisions, based on resolution plans that had been updated in previous resolution cycles. Resolution plans for 13 LSIs were updated in the 2022 resolution cycle. Of these, 11 were developed on the basis of simplified obligations and are therefore based on a two-year cycle. Since a resolution cycle does not coincide with the calendar year but rather runs from May to April, formal MREL decisions for the 2022 resolution cycle will only be adopted in 2023.

For institutions for which it is directly responsible, the Bank is required to follow the SRB's LSI guidelines. This resulted in two new developments for the 2022 resolution cycle. First, the assessment of the resolvability of institutions whose resolution plan states that the public interest test is met in the event of failure has been harmonised using the so-called "heatmap" tool. To this end, for each principle set out in the SRB Expectations for Banks,[1] a score ranging from low to high is given for the importance of the principle in question and a score ranging from zero to three is given for the extent to which the institution meets the principle. Second, a more harmonised approach is used to assess the impact of a systemic crisis on financial stability. The preservation of financial stability is indeed the second resolution objective pursued in the analysis of whether the public interest test is met. However, these two developments have not had a major impact on the resolution strategies of institutions for which the Bank is directly responsible.

In Belgium, LSIs are divided into three categories, each of which is subject to a different MREL calibration methodology. The first category includes institutions whose failure is not likely to be detrimental to the stability of the financial system in Belgium and which can therefore be wound up under normal insolvency proceedings. This category is subject to MREL equivalent to the amount needed to absorb the institution's losses. In other words, the MREL of these institutions corresponds to their capital requirements.

The second category comprises institutions whose resolution plan provides that they are likely to be able to be wound up under normal insolvency proceedings but whose failure could, in certain specific circumstances, notably in the context of a systemic crisis, impact the stability of the Belgian financial system, for example due to their links with the Belgian real economy and their level of (covered) deposits. For this category, the amount needed to cover loss absorption was adjusted upwards, so that their MREL exceeds their capital requirements. However, this upward revision was calibrated in accordance with the limits imposed by regulations and the SRB, meaning the MREL remains lower than for institutions in the third category.

The third category includes institutions whose resolution plan provides that the public interest test will be met in the event of a failure. In such cases, the resolution tools and powers should be used. In this context, the MREL incorporates not only an amount necessary to absorb losses but also an amount to ensure recapitalisation and market confidence at the end of the resolution process.

The Bank's Resolution Board decided in December 2021 to also monitor, as from 2022, the MREL capacity of institutions in the second category based on half-year reporting. The latter is a simplified version of the mandatory MREL and TLAC reporting for institutions whose MREL consists of a loss-absorption amount and an amount intended to ensure recapitalisation. This allows for smoother and more accurate monitoring of MREL for smaller institutions. For LSIs whose MREL is limited to a loss-absorption amount, this additional reporting is not necessary, as they meet the MREL through the own fund instruments, which are monitored through supervisory reporting.

2.2 Establishments falling under the authority of the SRB

The SRB is the competent resolution authority for significant institutions (SIs) and for cross-border LSIs.

1 See https://www.srb.europa.eu/system/files/media/document/efb_main_doc_final_web_0_0.pdf.

In addition to resolution plans, specific aspects of resolvability are further developed during each resolution planning cycle. The SRB Expectations for Banks serve as a guideline for the setting of annual priorities. The 2022 resolution planning cycle focused on three priorities, namely: (a) the identification of assets that could be used as collateral in order to obtain additional liquidity; in this context, institutions are asked to carry out an analysis of assets that are not used as collateral under normal circumstances; (b) plans to reorganise the business after application of the bail-in tool; and (c) the possibilities to split a resolution group or entity. Institutions with a bail-in strategy were also required to conduct a dry run before the end of 2022 and to use the lessons learned to make their strategy more operational. Liquidity remains a priority for the 2023 resolution cycle. Institutions have been asked to continue to work on the operationalisation of their resolution strategy. For resolution groups, this also applies to the mechanisms to transfer losses to the resolution entity and capital to subsidiaries. By the end of 2023, all institutions should meet the principles set out in the SRB Expectations for Banks.

In addition to the priorities applicable to all institutions under the SRB's authority, specific priorities can also be defined for each one. This is done on the basis of the heatmap tool mentioned above, with the understanding that each institution is checked to see whether it is on track to be resolvable by the end of 2023.

Since 1 January 2022, MREL, based on the SRMR2 rules, has been binding on all Belgian SIs. Each quarter, an analysis is carried out on the basis of the MREL and TLAC reporting in order to determine whether institutions comply with their MREL. In the course of 2022, a number of breaches were identified in this respect, which concerned both internal and external MREL and were based on both risk-weighted and non-risk-weighted MREL. However, all institutions concerned took prompt action to remedy the shortcomings identified and to adapt their risk management frameworks to prevent similar situations from arising in the future.

3. Establishment of resolution funding arrangements

The BRRD provides that a resolution fund financed by contributions from credit institutions and investment firms must be established in each Member State. By 31 December 2024, each resolution fund must reach a target level of at least 1 % of the total amount of covered deposits.

The SRMR established the Single Resolution Fund (SRF) within the banking union on 1 January 2016. The SRF replaced the national resolution funds for credit institutions, investment firms and financial institutions subject to the ECB's consolidated supervision. The SRF supports the actions taken by resolution authorities when a banking group fails. It may guarantee the assets or liabilities of a failing institution, grant loans, acquire certain of its assets, or, under specific conditions, make contributions to it. The SRF may also intervene in cases involving a bridge institution, an asset management structure or even a purchaser in the event of a sale of business. However, the resolution fund cannot directly absorb the losses of an institution under resolution.

In 2022, the institutions subject to the SRF jointly contributed € 13.7 billion (compared to € 10.4 billion in 2021). Of these contributions, € 447.6 million come from institutions subject to Belgian law, compared to € 346.9 million in 2021. This increase was mainly due to the strong rise in the volume of covered deposits, which determines the SRF's target amount. The 2022 contributions increased the SRF envelope to € 66 billion. The SRB estimates that, by the end of the transition period for establishment of the fund, which concludes in 2023, the SRF's contributions could total around € 80 billion. A further increase in covered deposits in the coming years could result in a higher amount, however.

In addition to its own resources, since the beginning of 2022, the SRF has had a revolving credit line from the European Stability Mechanism. This is an additional source of funding which can be drawn on in an emergency and which, if necessary, can double the size of the SRF. This credit line is initially fed by public funds in order to be able to immediately restore market confidence. It is financed by the Member States of the banking union and must be repaid by all institutions subject to the banking union contribution within a few years from its use.

Institutions not subject to the SRF, i.e. Belgian branches of third-country credit institutions or investment firms, as well as stockbroking firms incorporated under Belgian law that are not subject to the ECB's consolidated supervision through their parent company, are required to contribute to the national resolution fund. After payment of the 2022 contributions, the fund amounted to almost € 2.3 million. In 2023, it should reach € 2.6 million, which now constitutes the fund's target.