REPORT
2021

Prudential regulation and supervision

National Bank of Belgium

Eurosystem

Prudential regulation and supervision

A. Introduction

In 2021, the economic recovery was faster than expected in Belgium and elsewhere in Europe, although there are some persisting uncertainties, particularly concerning the latent risk of renewed waves of the COVID-19 pandemic. In these circumstances, the Bank's prudential activities have progressively returned to normal and certain exceptional support measures specific to the crisis have been gradually withdrawn.

While 2020 had brought the need for adjustments to the regulatory and legal framework concerning crisis-related aspects, in 2021 it became possible to refocus on matters relating to structural developments which had begun or been announced before the pandemic erupted. At microprudential level, the Bank is responsible for the supervision of credit institutions under the single supervisory mechanism (SSM), investment firms, insurance undertakings, financial market infrastructures and payment institutions. Changes in the regulatory and legal framework specific to certain sectors are described in chapter B, which also deals with developments applicable to all sectors. Among other things, the Bank continues to devote increasing resources and attention to checking compliance with the provisions on the prevention of money-laundering and the risks connected with climate change.

In 2021, it became possible to refocus the Bank's prudential activities on more structural risks for the financial sector

In this context with prudential activities steadily returning to normal, the priorities for the operational surveillance of institutions subject to the Bank's supervision are gradually undergoing a shift of focus from a policy of managing the repercussions of the crisis towards management of the more structural risks facing the financial sector, notably those relating to digitalisation, the low interest rate environment and the climate transition. The operational aspects relating to the supervision of financial institutions in 2021 are presented in chapter C.

The digitalisation of financial services gained further importance in 2021. Innovative developments, in particular, generate opportunities for the financial sector so long as financial institutions make the necessary investment, otherwise they will start lagging behind their competitors in that regard. These developments also create risks which justify the adoption of appropriate measures at regulatory and prudential level. Chapter D deals with the aspects of regulation and prudential supervision specifically connected with the digitalisation of financial services.

Finally, the Bank is also the national resolution authority in Belgium. In 2021, one of the main advances in this respect was the transposition of the second Bank Recovery and Resolution Directive (BRRD2) into Belgian law. Details of the action taken under this mandate are given in chapter E.

Apart from its microprudential missions, the Bank also exercises a macroprudential mandate, the Law of 24 April 2014 having officially designated the Bank as the macroprudential authority in Belgium. Recent initiatives pursuant to that mandate are described in box 5 of the section of the Report on "Economic and financial developments". The Macroprudential Report published annually by the Bank describes the macroprudential framework in more detail.

B. Regulatory and legal framework

1. Banks

1.1 Aspects relating to management of the COVID-19 crisis

1.1.1 Prudential measures during the COVID-19 crisis

The COVID-19 crisis also left its mark on the prudential regulatory framework of the banking sector. The previously announced modifications to that framework were suspended and specific COVID-19-related measures were adopted at global, European and national level. In that regard, the emphasis was on support for bank lending to the real economy, and on the control of credit risks. The many modifications to the regulatory framework and the prudential measures adopted in the context of the COVID-19 crisis are described in last year's Report (see section II.B.1.1. of the Annual Report 2020). A number of those modifications and measures remained in force in 2021 but were phased out during the year.

A number of specific prudential measures relating to COVID-19 were phased out in 2021

Lending to Belgian businesses and households

The maintenance of lending to the Belgian economy was vitally important during the COVID-19 crisis. The Bank therefore continued to keep a very close watch on what was happening, monitoring the loans granted by Belgian banks to Belgian households and firms at the level of both individual banks and individual economic sectors. For that purpose, lending in neighbouring countries and in the euro area provided the basis for comparison. The conclusions regarding loans to Belgian firms were notified monthly to the federal Parliament.

Recourse to the system of State guarantees and moratoria on loan repayments established during the pandemic was also monitored. In order to provide temporary support for businesses, self-employed workers and households, the federal government and the Belgian financial sector had concluded an agreement on the subject in 2020 with the support of the Bank. That agreement was based on two pillars: the grant of new State-guaranteed loans to firms and the option of deferring payment on existing loans to firms and households. The first of these pillars was maintained throughout 2021. Thus, banks and SMEs were still able to use a federal government guarantee scheme for loans with a maturity of between one and five years. Overall, little use was made of this scheme. That indicates first that the banks remained willing to continue lending to the real economy during the pandemic, even without that aid measure, and next that demand – particularly for new investment loans – was modest during that period. The second pillar of that agreement, namely the general deferral of payments on existing loans to firms and households, came to an end during 2021, after having been extended several times. This measure was very successful: it was used for 6 % of outstanding household mortgages and 13 % of outstanding business loans. This payment deferral therefore provided significant support for those businesses and households in getting through the crisis.

Finally, the European Central Bank (ECB) and the Bank kept a close eye on the management of credit institutions' credit risks. In that regard, they were primarily interested in non-performing loans, the creation of adequate provisions, classification of loans according to their credit quality in accordance with the International Financial Reporting Standards (IFRS), etc. (see also section C.1.2.). In order to ensure a sustainable recovery following the shock caused by the pandemic, banks must not only continue lending to the economy and supporting viable borrowers facing temporary financial difficulties. It is also vital that they recognise crisis-induced losses promptly and in full, that they make proper provisions for future losses, and that they adopt pro-active credit risk management practices.

The recommendations limiting profit distributions ended on 30 September

1.1.2 Dividend policy

At the start of the COVID-19 crisis, the prudential supervisory and regulatory authorities eased some aspects of the regulatory capital requirements in order to support lending and absorb the losses caused by the crisis. In order to avert inappropriate use of these available buffers, with effect from March 2020, the ECB, the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA), the European Systemic Risk Board (ESRB) and the Bank adopted various micro- and macroprudential measures to limit the distribution of profits in the form of dividends, share buybacks or variable remuneration (see section II.B.1.3. of the Annual Report 2020).

While all forms of profit distribution were strongly discouraged in 2020, the ESRB's updated Recommendation of 15 December 2020 allowed scope for the limited resumption of dividend distributions from 2 January 2021 to 30 September 2021 [1]. In accordance with the ensuing ECB Recommendation addressed to significant credit institutions [2], during that nine-month period, the Bank therefore recommended that Belgian less-significant credit institutions should not pay out amounts to their shareholders representing more than 15 % of their cumulative profits for the years 2019 and 2020, or more than 20 basis points in terms of the Tier 1 capital ratio, whichever is the smaller [3]. Similar restrictions were introduced for Belgian insurers (see section B.2.1.). A macroprudential Recommendation by the Bank extended these new recommendations to all Belgian banks and insurers, including subsidiaries of international groups [4].

As the outlook for the economy and the financial sector improved during the year and the measures supporting the economy were gradually withdrawn, it became possible after 30 September 2021 to remove these exceptional conservation measures aimed at strengthening the financial sector's resilience. In accordance with the decisions of the ECB and the ESRB not to adopt new Recommendations in this area, the Bank decided to let the micro- and macroprudential Recommendations expire on that date. However, the Bank does encourage financial institutions to remain cautious in their decisions on dividends, share buybacks and variable remuneration, and to base those decisions on a forward assessment of their capital needs [5].

1.1.3 The European Commission's strategy for non-performing loans

In December 2020, the European Commission published its strategy for preventing the future build-up of non-performing loans (NPL) in the EU in the aftermath of the COVID-19 crisis. That strategy follows on from the measures taken since 2017 by the European Commission, but also by the European Central Bank and the European Banking Authority (in particular, the measures on minimum provisions and the NPL reduction strategies). This strategy aims to ensure continuity of access to funding sources for households and businesses during the crisis.The proposed strategy is structured around four goals.

First, the Commission intends to develop secondary markets for trading impaired assets while guaranteeing debtor protection. That would enable credit

1 ESRB Recommendation of 15 December 2020 amending Recommendation ESRB/2020/7 on the restriction of distributions during the COVID-19 pandemic (ESRB/2020/15).
2 ECB Recommendation of 15 December 2020 (ECB/2020/62).
3 Circular NBB_2020_049 of 22 December 2020 on measures in the context of coronavirus – Expectations concerning the dividend policy and remuneration policy with effect from 2 January 2021.
4 Macroprudential Communication of the Bank dated 18 December 2020 on the restriction of profit distribution by Belgian financial institutions.
5 Press release by the Bank: "The National Bank calls for prudent dividend policy after 30 September", 28 September 2021.

institutions to effectively reduce the proportion of NPLs on their balance sheet and thus to concentrate on their role of granting loans.

In order to enhance transparency on these markets and improve the exchange of information between the various players, the Commission also proposes setting up a central data hub at European Union level. In that connection, the EBA conducted a consultation in May 2021 on the revision of the non-performing loan reporting tables.

Second, in order to enhance legal certainty and speed up debt recovery, the Commission proposes reforming the EU corporate insolvency and debt recovery legislation in order to ensure closer convergence between the various existing frameworks.

Third, the Commission proposes supporting the creation of national asset management companies. These companies should enable struggling credit institutions to remove NPLs from their balance sheet, the aim being for these institutions to be able to concentrate on lending. The Commission also intends to promote cooperation between these national asset management companies, particularly in regard to the exchange of good practices and the co-ordination of measures.

The Bank continues to favour the full and speedy implementation of the Basel III standards

Finally, the Commission draws attention to the option available to the authorities in accordance with the BRRD and the State aid framework to implement precautionary public support measures where needed in order to ensure the continued funding of the real economy.

1.2 Activities of the Basel Committee on Banking Supervision

After finalising the Basel III rules at the end of 2017, the Basel Committee on Banking Supervision (BCBS) announced a pause in the drafting of new regulations. The Committee turned its attention to implementing the latest elements of the Basel III framework (see section B.1.3. on the publication of a new banking package by the European Commission), assessing the operation of its regulatory framework in the context of COVID-19 and, more generally, analysing the current structural trends in the banking world, such as digitalisation, the impact of the low interest rate environment on business models, and the approach to climate-related financial risks.

In the course of this latest work, the Committee published analytical reports on the integration of climate-related financial risks in banks' risk management, and a consultative document setting out principles for the effective control and monitoring of these risks in internationally active banks (see section B.3.2.).

The Committee is currently also processing the responses to a consultative document on the prudential treatment of crypto-assets (see section D.1.3.). Although banks' exposure to them is limited at this stage, the steady advance of these assets and the associated services, and the innovations in this field, combined with the growing interest in them on the part of some banks, could heighten the risks to financial stability and to the banking system in the absence of clear prudential treatment.

Finally, the Committee published new principles designed to strengthen the banks' operational resilience, to enable them to cope better with serious events such as pandemics, cyber-security incidents, technological failures or natural disasters, and to adapt and recover from them. Apart from these principles, the Committee updated a number of related principles concerning good management of operational risks on the part of banks. In view of their vital role in the global financial system, bolstering the banks' resilience in the face of operational shocks should make the financial system as a whole more resilient.

1.3 Integration of the definitive Basel III standards into European legislation

On 27 October 2021, the European Commission presented a new package of changes to the banking legislation, comprising a Directive amending the Capital Requirements Directive (CRD6)[1] and two Regulations, namely an updated version of the Capital

1 Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/36/EU as regards supervisory powers, sanctions, third-country branches, and environmental, social and governance risks, and amending Directive 2014/59/EU, 27 October 2021.

Requirements Regulation (CRR 3[1]) and a Regulation on resolution-related subjects[2].

The main aim of this set of texts is to implement the final elements of the Basel III standards for European banks. The BCBS completed its reforms of the banking regulations at the end of 2017 by publishing measures for calculating the risk-weighted assets (RWA), which form the denominator of the risk-based capital ratio. During the financial crisis, there were frequent questions concerning the under-calibration, complexity and opacity of the calculation of the risk-weighted assets via internal models, and the unjustified variability in that regard. The Committee therefore decided to abolish the use of internal models for risks considered incapable of being modelled (e.g. operational risks and credit risks inherent in equity exposures) and to limit it for other risks. The last part of these restrictions was named the "output floor". It specifies that the total risk-weighted assets calculated via internal models must not be less than 72.5 % of the risk-weighted assets calculated by the standardised, more conservative approach. The Basel Committee plans to introduce these standards on 1 January 2023, with the output floor initially set at 50 %, and then to be raised gradually to reach 72.5 % in 2028.

Apart from the implementation of the Basel III standards, the new package of measures also concerns greater harmonisation of certain powers and supervision tools. Thus, the package includes proposals for the regulation of European branches of third-country banks, with closer cooperation and the exchange of information between the supervisory authorities concerned, harmonisation of the minimum capital and liquidity requirements, and the possibility of subjecting systemically important branches to stricter supervision, or asking the banks concerned to convert those branches into subsidiaries. If these proposals are adopted, they will permit more uniform supervision of such branches. These measures also further specify the requirements concerning expertise, availability and aptitude ("fit and proper") for the management and key personnel of credit institutions, strengthen the supervisory authorities' power to impose sanctions, give them a greater say in significant operations such as mergers or the acquisition of interests in commercial undertakings, and finally consolidate the independence of the supervisory authorities by banning them from trading in the financial instruments of institutions subject to their supervision or performing duties in such institutions.

One of the final parts of the new banking package consists in the more detailed drafting of the rules on the management and monitoring of environmental, social and governance – or ESG – risks. In particular, the supervisory authorities are required to integrate these risks into their supervision process and organise regular climate stress tests. Institutions must include these risks in their risk management and report on them to both the supervisory authority and the general public.

The Bank welcomes both the implementation of the Basel III standards for European banks and the aspects of this package mentioned above which are not related to own funds, but it regrets that the European Commission has opted to introduce standards which are not entirely in line with the BCBS stipulations. For instance, the transitional measures for the introduction of the output floor go much farther than those advocated by the BCBS and continue for longer. The proposal also maintains the pre-existing deviations from the current Basel rules, which make the requirements less strict for European banks. The Bank continues to favour the full, speedy implementation of the Basel III standards. In the long term, it is very much in the interests of the European economy to be able to rely (very) largely on a robust financial system in which the banks have adequate own funds. Deviating from the Basel III Agreement could have an adverse impact on confidence in both the European banking sector and the EU regulatory framework. That in turn is liable to have a detrimental effect on financial stability and on the economy. It is therefore important to implement international agreements in full and in a timely and consistent manner. With that in mind, the Bank joined more than 25 other European central banks and supervisory authorities in signing a letter to that effect, addressed to the European Commissioner for Financial Services.

1 Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No. 575/2013 as regards requirements for credit risk, credit valuation adjustment risk, operational risk, market risk and the output floor, 27 October 2021.

2 Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No. 575/2013 and Directive 2014/59/EU as regards the prudential treatment of global systemically important institution groups with a multiple point of entry resolution strategy and a methodology for the indirect subscription of instruments eligible for meeting the minimum requirement for own funds and eligible liabilities, 27 October 2021.

In addition, the output floor is only imposed at consolidated level for international banking groups. In the past, the banking rules have always applied both at consolidated group level and to individual local banking subsidiaries. This would create a regrettable precedent for Member States such as Belgium which host banks from other EU Member States, in view of the currently incomplete state of the banking union.

1.4 Amendment of the Banking Law

The Law of 11 July 2021, which transposes the CRD5 Directive and anticipates the transposition of some of the Directive's provisions concerning the prudential supervision of investment firms (Investment Firms Directive – IFD), came into force on 23 July 2021[1].

1 Law of 11 July 2021 transposing Directive 2019/878 of the European Parliament and of the Council of 20 May 2019, Directive 2019/879 of the European Parliament and of the Council of 20 May 2019, Directive 2019/2034 of the European Parliament and of the Council of 27 November 2019, Directive 2019/2177 of the European Parliament and of the Council of 19 December 2019, and Directive 2021/338 of the European Parliament and of the Council of 16 February 2021, and containing miscellaneous provisions (Moniteur belge/Belgisch Staatsblad of 23 July 2021, Ed. 3, pp. 76062 ff.).

The main changes which this law makes to the Banking Law concern financial holding companies and mixed financial holding companies, third-country groups operating via regulated subsidiaries in the EU, the introduction of the Pillar 2 guidance (P2G) and the leverage risk. In regard to the macroprudential tools, the systemic risk buffer is now supplemented by the option of specifying one or more sectoral systemic risk buffers.

The Covered Bonds Directive aims to establish a minimum harmonised framework for the issuance of covered bonds

Changes were likewise made to the Banking Law concerning the definition of a strategic decision and the remuneration policy.

Finally, a proportional regime was also introduced. This specifies that submission of the report by the effective management on internal control by less significant institutions (LSIs) and the updating of the recovery plans of certain credit institutions can take place less frequently. From now on, LSIs will only have to submit a full internal control report by the effective management every two years. In the year in which a full report is not required, a brief summary note will be sent. The recovery plan will only need to be updated every two years by credit institutions subject to simplified obligations.

1.5 Transposition of the Covered Bonds Directive into Belgian law

By means of the Covered Bonds Directive[1], the European Union aims to establish a minimum harmonised framework for the issuance of such bonds. Covered bonds are debt securities covered by a pool of segregated loans. In the event of insolvency or resolution of the credit institution which issued the covered bonds, bond-holders have an exclusive or preferential right to those segregated loans and a general right of recourse against the credit institution.

Since the minimum harmonisation is based on best practices derived from existing legal frameworks of the Member States, the changes to be made to the Belgian legal framework are minor. In order to be able to offer investors a high degree of protection and to guarantee the quality of the debt instruments issued, the current level of requirements under Belgian law was maintained. Provisions which go beyond the Directive's minimum requirements are thus retained. Some changes were made in order to exercise some of the options set out in the Covered Bonds Directive. The main changes lie in the introduction of new requirements concerning extendable maturity structures and the publication of information for investors, and in various additional clarifications concerning (i) valuation methods, (ii) eligibility criteria for cover assets, (iii) use of derivative contracts, (iv) liquidity and coverage tests, and (v) conditions for including acquired cover assets in the cover pool. The Covered Bonds Directive is transposed into Belgian law[2] by a law and an as yet unpublished Royal Decree. These texts will enter into force on 8 July 2022.

Apart from the Covered Bonds Directive, Regulation (EU) 2019/2160[3] which essentially amends Article 129 of the CRR[4], was adopted. These amendments are primarily related to the identification of high-quality covered bonds eligible for a preferential risk weighting. This Regulation will also enter into force on 8 July 2022.

1 Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019 on the issue of covered bonds and covered bond public supervision and amending Directives 2009/65/EC and 2014/59/EU

2 Law of 26 November 2021 amending the Law of 25 April 2014 on the status and supervision of credit institutions and investment firms for the purpose of transposing Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019 on the issue of covered bonds and covered bond public supervision, and amending the Law of 11 March 2018 on the status and supervision of payment institutions and electronic money institutions, the taking up and pursuit of the activities of a payment service provider and the activity of issuing electronic money, and access to payment systems.

3 Regulation (EU) 2019/2160 of the European Parliament and of the Council of 27 November 2019 amending Regulation (EU) No. 575/2013 as regards exposures in the form of covered bonds.

4 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.

1.6 Reporting

In order to monitor the solvency position and financial situation of financial institutions subject to their supervision, the supervisory authorities (the Bank, the ECB, the Single Resolution Board (SRB) and the EBA) regularly request information from those institutions. To that end, various reporting requirements are imposed at both European level (by the EBA, the ECB and the SRB) and at national level (by the Bank). In this connection, proportionality and the overall reporting burden borne by the institutions are always taken into account.

The authorities concerned are aware of the reporting burden and are taking measures to alleviate it to some extent in the future

However, the authorities concerned recognise that in recent years the reporting obligations have become much more numerous and complex and wish to address this. In this context, the CRR gave the EBA a number of mandates[1] to explore ways of alleviating the reporting burden and the associated costs for the institutions.

Cost-benefit analysis

Under the mandate given by the CRR, the EBA conducted a cost-benefit analysis which included examination of the costs that institutions incurred in complying with the (European) reporting requirements on reporting to the supervisory authorities. The analysis also assessed whether those costs were proportionate to the benefits for prudential supervision and made recommendations on how the costs could be reduced, especially for the smallest institutions[2]. The final cost-benefit report was published on 7 July 2021. It contains 25 recommendations aimed at making the European reporting framework more proportionate, continuing to promote coordination between the various supervisory authorities that draw up reporting obligations, and encouraging institutions to further automate their internal reporting processes[3]. The EBA considers that the combined effect of these recommendations could ease the burden on institutions in general, especially in the case of the smallest banks. The report's recommendations will be implemented gradually in the years ahead.

Feasibility report on the creation of an integrated reporting system

Apart from the cost-benefit analysis, the EBA was also asked to draft a feasibility report for the development of an integrated system for collecting statistical data, prudential data and resolution data, in cooperation with the authorities responsible for prudential supervision, deposit guarantee schemes, resolution and the European System of Central Banks (ESCB). Among other things, that feasibility study and integrated reporting framework should lead to the definition of processes for harmonising the existing and future reporting obligations, easing the financial and administrative burdens associated with reporting, and improving the efficiency of the overall reporting process. The final feasibility report was published[4] on 16 December 2021 and presents a long-term view of the organisation of reporting procedures and the way in which they can be streamlined and improved in the future, and of cooperation between the authorities concerned. The report identifies certain measures that might be feasible in the short term and aspects requiring more detailed research.

For some time the ESCB has been working, via its Integrated Reporting Framework (IReF), to integrate the various statistical reporting requirements which it has introduced under its mandate. This ESCB project gathered momentum over the past year as a result of the ECB's public cost-benefit analysis[5]. The findings of that ECB analysis will provide guidance for this project. The lessons to be drawn from this ESCB project could give considerable impetus to the next steps of the EBA's broader feasibility report, aimed at integrating not only statistical data but also prudential and resolution data.

The Bank has always actively supported the above-mentioned European initiatives and, within the limits of its mandate, has also taken measures

1 See Article 430 (8)(c) of Regulation (EU) No. 575/2013 (CRR).

2 "Smaller institutions" means institutions which conform to the definition of "small, non-complex institutions" in Article 4 (1), point 145, of Regulation (EU) No. 575/2013 (CRR).

3 EBA Study of the cost of compliance with supervisory reporting requirements report (EBA/REP/2021/15), 7 June 2021.

4 EBA's feasibility study on integrated reporting system provides a long-term vision for increasing efficiencies and reducing reporting costs (EBA/REP/2021/38), 16 December 2021.

5 ESCB long-term strategy for banks' data reporting, November 2020.

to alleviate to some extent the reporting burden imposed at national level. In revising "Scheme A" (Book 1 of the scheme for the periodic information which credit institutions have to submit concerning their financial situation), which it uses for prudential and statistical purposes, the Bank has attempted to alleviate the reporting burden by removing some of the obligations[1].

1.7 EBA guidelines and Bank Circular on loan origination and monitoring

In June 2020, the EBA published new guidelines on loan origination and monitoring (EBA/GL/2020/06). These guidelines form part of the final component of the EU's July 2017 action plan[2] in response to the problem of non-performing loans[3] (NPLs).

The new EBA rules on loan origination and monitoring aim to strengthen financial stability and the soundness of the European banking system

These new guidelines aim to improve the credit quality of new loans and the monitoring of existing loans in order to limit the future incidence of NPLs and thus to strengthen financial stability and the soundness of the European banking system. But they also aim to reflect supervision priorities and developments in supervision policy relating to lending, such as the development of socially responsible investment.

These guidelines should help institutions to improve their internal governance practices, arrangements, processes and systems in order to ensure that their loan origination and their credit risk management and monitoring comply with sound, prudent standards[4]. Institutions must abide by the regulations, particularly in regard to consumer protection, mortgage lending and measures to combat money-laundering, but they must also deal appropriately with the new emerging risks, such as those concerning technological innovations, while taking care to develop more socially responsible investment, e.g. by taking better account of environmental, social and governance (ESG) factors.

However, the EBA stresses that these guidelines should be implemented proportionately. For instance, in regard to loan origination, that proportionality can be applied according to the size, nature and complexity of the loan, while in regard to loan monitoring it may also be applied according to the type, size and risk profile of the borrower.

Circular NBB_2021_18 transposed these EBA guidelines in full. They came into force on 30 June 2021. However, in order to take account of the substantial operational adjustment efforts that institutions made during the COVID-19 pandemic, the Bank decided to grant them a 6-month tolerance margin for conforming to that Circular in practice.

In the case of new loan origination, institutions had to conform to the Circular by 31 December 2021. However, they have until 30 June 2022 to comply in the case of some old loans renegotiated[5] after the Circular came into force. Finally, in regard to the monitoring of existing loans, institutions have to comply with the Circular by no later than 30 June 2024.

The scope of these guidelines is very broad since – with a few specific exemptions – it covers all the institutions' credit risks on both a consolidated and a non-consolidated basis, throughout the lifecycle of those loans. Finally, certain sections of these guidelines also apply to non-bank lenders who come under the Financial Services and Markets Authority (FSMA) and the Federal Public Service (FPS) Economy.

For institutions subject to the Bank's supervision, these guidelines cover internal governance for loan origination and monitoring in accordance with Circular NBB_2018_28[6], lending procedures, loan pricing and the loan monitoring framework. They also cover the valuation and revaluation of movable and immovable property.

1 See on this subject the Bank's Circulars NBB_2021_001 of 12 January 2021 and NBB_2021_11 of 1 June 2021 on changes to Scheme A, Book 1.

2 See https://www.consilium.europa.eu/en/press/press-releases/2017/07/11/conclusions-non-performing-loans/.

3 These guidelines therefore supplement the EBA guidelines on non-performing exposures and restructured exposures (EBA/GL/2018/06 of 31 October 2018 transposed in Circular NBB_2019_21) and the guidelines on the publication of non-performing and forborne exposures (EBA/GL/2018/10 of 17 December 2018 transposed in Circular NBB_2019_11).

4 Based in particular on the EBA guidelines on internal governance (EBA/GL/2017/11 of 21 March 2018).

5 If the renegotiation follows specific approval and if its implementation entails the conclusion of a new loan agreement or an amendment to the existing agreement.

6 Transposing the EBA guidelines of 26 September 2017 on internal governance (EBA/GL/2017/11).

The guidelines thus specify that, when granting loans, institutions must in particular make sure that real estate is valued by internal or external valuers, in order to ensure reliable valuation of the collateral. For that purpose they can use advanced statistical models for residential mortgage loans if they comply with specifical conditions for the use of such models. Given the maturity of the Belgian housing market, however, the Bank expects[1] that in most cases the banks will use these statistical models to assess the value of residential property.

Also, in order to ensure the proportionate implementation of these requirements, the guidelines mention that valuations can be conducted with due regard for the size, nature and complexity of the loan and the collateral, and the link between the loan and the collateral. Institutions will therefore have to ensure above all that they establish an internal policy determining the type of valuation to be used for each type of collateral.

Finally, the Bank expects that, over time, institutions will improve their loan origination and monitoring practices and their collateral valuation procedures. Among other things, it therefore expects them to develop a holistic approach in order to take greater account of ESG factors and the associated risks in their risk appetite policies, and in their credit risk policies, procedures and management.

1.8 Recording of interest rate risk hedging operations under Belgian bank accounting law

The way in which credit institutions record their interest rate risk hedging operations in the statutory accounts (solo) is governed by Article 36bis of the 1992 Royal Decree on accounting[2].

That provision was amended by the Royal Decree of 29 August 2021[3] for two reasons. On the one hand, the aim was to enshrine in law the accounting practices previously developed on the basis of individual exemptions granted by the Bank (and prior to that by the ex-CBFA) in regard to macro-hedging operations used by institutions as part of the overall management of their interest rate risk exposure. The changes to that provision also aimed to resolve various practical application issues which have arisen in recent years, in particular in the event of hedging operations breaking down or being ineffective. On this specific point, the approach adopted should limit distortions in the statutory profit and loss account compared to the treatment of the same aspects in the consolidated accounts based on the IFRS international accounting standards (but without aligning the other accounting rules with the IFRS). The Decree also requires institutions to divulge more information on these operations in an annex to their statutory annual accounts.

The new regime in force allows institutions to apply a special method for recording macro-hedging operations subject to fulfilment of a set of conditions, particularly in regard to the institution's monitoring of its interest rate risk and the effectiveness of its hedging operations. Institutions wishing to use this approach must first request permission from the Bank on the basis of an application for which the details are described in a Bank Circular[4] dated 5 October 2021, accompanied by a special authorised auditor's report. This Circular likewise clarifies various points concerning the practical implementation of the new Article 36*bis*.

The said decree of 29 August 2021 also specifies that the exemptions previously granted by the Bank (and the ex-CBFA) remain valid until 31 December 2022. Authorisation is therefore required for continuing to apply the special accounting practice to macro-hedging operations beyond that date.

1 As clarified in its press release on questions and answers concerning the new mortgage rules and in Annex 5 (detailed FAQ) to Circular NBB_2021_18.

2 Royal Decree of 23 September 1992 on the annual accounts of credit institutions, investment firms and companies managing collective investment funds.

3 Royal Decree of 29 August 2021 amending the said Royal Decree of 23 September 1992,

4 Circular NBB_2021_20 of 5 October 2021 on rules for applying Article 36bis of the Royal Decree of 23 September 1992 on the annual accounts of credit institutions, investment firms and companies managing collective investment funds.

2. Insurance undertakings

2.1 Aspects relating to management of the COVID-19 crisis

Dividend distribution policy

In April 2020, amid the great uncertainty surrounding the COVID-19 crisis, the Bank set out its expectations concerning dividend payments, share buybacks, variable remuneration and profit sharing.

Following the publication on 15 December 2020 of the ESRB Recommendation [1] calling on the national authorities to take the necessary steps to permit dividend distribution or share buybacks solely under strict conditions, the Bank published its new policy on 26 January 2021 via Circular NBB_2021_05, in which the Bank insisted that all Belgian insurance and reinsurance undertakings and groups must suspend their discretionary dividend distributions and own share buybacks until at least 30 September 2021, unless they adopted a very cautious approach in implementing these distributions and fulfilled certain conditions concerning solvency and the amount of the distribution. This new policy, which is slightly less stringent than in 2020 in that it allowed some undertakings to distribute profits, was based essentially on three criteria: the first criterion, applicable without distinction to all undertakings, aimed to limit the amount of the distributions (compared to the two years preceding the COVID-9 pandemic); the other two criteria divided undertakings into three categories: those with a solvency ratio of less than 150 % were asked not to distribute any dividends; those with solvency ratio of over 200 % were able to distribute cautiously, and for undertakings with a solvency ratio between 150 % and 200 %, a distinction was made according to the amount to be distributed in relation to the eligible own funds under Solvency II. Limited distributions, i.e. amounting to less than 10 % of the eligible own funds, could be carried out, while larger distributions, i.e. above that 10 % threshold, had to be subject to convincing arguments discussed with the Bank concerning the prudence and sustainability of the distribution. This Circular also required (re)insurance undertakings and groups under its supervision to notify the Bank in advance of their intentions in regard to dividends.

The Bank calls on insurers to remain cautious in regard to dividends

On 23 September 2021, the ESRB decided to let its Recommendation on the restriction applicable to dividend distributions expire with effect from 30 September 2021. In accordance with that decision,

1 Recommendation of the European Systemic Risk Board of 15 December 2020 amending Recommendation ESRB/2020/7 on restriction of distributions by European financial institutions during the COVID-19 pandemic.

the Bank also decided to let Circular NBB_2021_05 of 26 January 2021 expire on that same date, while calling on undertakings subject to its supervision to remain cautious in their decisions on dividends, share buybacks and variable remuneration. From 1 October 2021, the Bank therefore resumed assessing the prudence of institutions' distribution policies via the ordinary supervision process.

Suspension of COVID-19 reporting

On 31 March 2020, for the purpose of quickly assessing the impact of the COVID-19 pandemic both at the level of the various insurance undertakings and on the sector as a whole, the Bank had introduced a new reporting in order to frequently collect updated key data. As the conditions on the financial markets had stabilised, that reporting was suspended after 31 March 2021 until further notice. An analysis of the impact of COVID-19 on the insurance sector, assessed up to 31 March 2021 on the basis of those reports, is available on the Bank's website [1].

Credit insurance support system

In both domestic and international trade, it is usual to underwrite credit insurance for the delivery of certain goods. That insurance offers protection against the insolvency or credit risk of the counterparty when the goods have been supplied but the invoice has not yet been paid. Credit insurance fosters confidence in trade and therefore stimulates economic growth. At times of crisis, however, the risks for credit insurers may increase. In order to control these risks, they are therefore tempted to reduce their credit lines. They may thus restrict or suspend the coverage of unpaid invoices with immediate effect. Obviously, in an already difficult economic context, that may create economic frictions and lower the volume of trade.

In order to avoid such a contraction of credit lines during the COVID-19 crisis, the government – assisted by the Bank – devised a reinsurance system to guarantee maintenance of the credit lines and thus to support the credit insurance sector. This support system was active from April 2020 to June 2021. It was structured so that the first loss was largely borne by the sector, which retained the necessary incentives to continue managing claims properly. In this way, the Belgian State never had to bear the entire loss.

While the credit lines granted by the credit insurance sector totalled € 39.8 billion at the end of 2019, they had declined to € 30.9 billion at the start of the COVID-19 crisis, in March 2020. In April, when the system came into effect, that figure increased to € 39.4 billion. The support arrangements thus permitted the maintenance of domestic and foreign trade during the COVID-19 crisis.

2.2 July 2021 floods

The flooding that took place from 14 to 16 July 2021 caused a huge amount of damage, particularly to buildings and businesses, and had serious repercussions on many people's lives. Although not all the damage was insured, the insurance and reinsurance sector settled the bulk of the insured claims, primarily via the cover included under fire insurance for "ordinary risks" which also concern family homes, farm buildings, etc. as described in the legislation [2]. For these risks, fire insurance must include cover against flooding. In the past, this obligation has been imposed by law in order to protect policy-holders against natural disasters. Furthermore, in order to preserve the financial stability of the insurance sector as

1 See https://www.nbb.be/doc/cp/eng/2020/nbb_covid19reporting.pdf.

2 Article 5 of the Royal Decree of 24 December 1992 implementing the Law on terrestrial insurance contracts.

well, e.g. in the event of exceptional natural disasters, the legislation lays down specific mechanisms, such as limiting claims to a maximum amount of cover per insurer and per disaster, beyond which the regional disaster funds are mobilised. There is no mandatory insurance against natural disasters for other risks insured under fire insurance or other policies, such as motor insurance, but cover can be negotiated case by case with each policy-holder.

In view of the considerable impact of the July 2021 floods, the Regions and the insurance sector together devised specific protocols in order to compensate policy-holders as quickly as possible and to strike the right balance between the financing cost for the Regions and the financial stability of the insurance sector. The protocols make provision for exceptionally doubling the insurers' legal limit on cover, and state that insurers would be expected to prefinance sums in excess of that higher limit by means of a loan. The Walloon Region would be expected to repay these amounts to the insurance sector from 2024 onwards. The total damage caused by the flooding is currently estimated at € 2.1 billion. However, these estimates may be adjusted in line with how the handling of claims is going.

While these protocols were being negotiated, discussions also began in order to examine how the legislation on natural disasters can be adapted to take account of the lessons to be learnt from the recent flooding. The aim is to design a more robust legal framework which offers greater legal certainty in the event of exceptional natural disasters. The emphasis will be placed in particular on calibrating the limit on cover for insurers and future adjustments to it. In a context in which research has shown that climate change may lead to more frequent and more severe natural disasters, this could have an impact on insurers and reinsurers which will be influenced by the degree of government intervention. The balance between the financing cost for the Regions and the stability of the insurance sector (insurers and reinsurers, where appropriate) will thus need to be guaranteed in a sustainable way. The appropriate calibration of the limit on cover must also ensure that any increase in premium remains affordable for policy-holders. The financing of disaster funds will thus have a prominent place in these discussions, as it is important to ensure that the necessary funds are available in the event of another natural disaster.

2.3 Changes to the regulatory framework

Revision of the Solvency II Directive

Solvency II, the prudential supervision framework for European insurers and reinsurers, has applied since 1 January 2016. It covers a broad range of quantitative and qualitative requirements on the taking up and pursuit of the business of insurance and reinsurance. The Solvency II framework also includes arrangements for revision to permit adjustments to the regulations on the basis of past experience. EIOPA's mandate to submit a technical opinion to the European Commission by the end of 2020 on the revision of the long-term guarantee measures and the equity risk measures therefore originated directly from the Directive itself. Following a formal request for a technical opinion, that mandate was extended on 11 February 2019 to a range of additional components which make up the main part of the Directive.

EIOPA's opinion was sent to the European Commission and published on 17 December 2020. It comprises specific proposals for amending the regulatory framework, together with the findings of a holistic impact assessment conducted at European and national level. EIOPA also published a detailed communication reporting on a large-scale consultation with market players concerning the revision proposals, and the reasons for the final proposals based on a cost-benefit analysis of the various technical options considered.

On 22 September 2021, following the detailed analyses by EIOPA, the European Commission formulated a set of legislative proposals for revision of the Solvency II Directive. Those proposals are based mainly, but not entirely, on EIOPA's opinion. They aim to improve the main quantitative, qualitative and reporting requirements under that framework and are also intended to support the EU policy priorities, such as the financing of the post COVID-19 economic recovery, completion of the capital markets union, and channelling of the necessary funds under the European Green Deal.

The proposals adopted aim in the first instance to amend the Solvency II Directive. A proposal for a new Directive on the recovery and resolution of insurance and reinsurance undertakings was also published. Surprisingly, the proposals on the delegated Regulation supplementing the Directive were not published at the same time. However, in an official Communication, the European Commission announced the likely main adjustments.

Key points among the main proposals in the EIOPA opinion include better access to the principle of proportionality for low-risk undertakings and the introduction of a recovery and resolution framework for insurance undertakings, via the proposal for a new Directive (see section E.1). The main quantitative changes proposed concern the adjustment of the technique for extrapolating the risk-free yield curve, for which long-term market data would be partly taken into account, refinement of the volatility adjustment permitting better allowance for firms' asset and liability management in the calibration of that adjustment, and the application of shocks to negative interest rates as part of the capital requirements for interest rate risk.

The European Commission formulated legislative proposals for the revision of the Solvency II Directive

The European Commission's proposal deviates considerably from EIOPA's opinion: in particular, it takes no account of firms' lapse and mortality risk in calculating their volatility adjustment, it does not apply a shock to the extrapolated section of the yield curve as part of the capital requirements for interest rate risk, it reduces the percentage used for the cost of capital in the risk margin, it introduces a transitional measure for the new risk-free yield curve, and it makes no provision for introducing certain macroprudential tools targeting systemic risks.

The reform package proposed by the European Commission will be analysed in more detail and discussed by working groups in the European Commission, the European Parliament and the EU Council. Those discussions will continue during 2022, in preparation for the next inter-institutional negotiations which, in the near future, should lead to a new, final agreement on the Solvency II supervision framework.

Amendment of the Insurance Supervision Law

The Law of 27 June 2021 on miscellaneous financial provisions amended the Insurance Supervision Law in two respects. First, various adjustments were needed following the entry into force of the new Code for Companies and Associations. In addition, Belgium had to transpose Directive 2019/2177[1].

I. Adjustments relating to the new Code for Companies and Associations

The first adjustments to the new Code for Companies and Associations involve the formal amendment of numerous references which the Insurance Supervision Law made to the old Company Code. Next, taking account of the prudential objectives of the Insurance Supervision Law, a number of amendments were made in relation to the new Code's provisions.

Thus, having regard to their obligations concerning own funds, the only legal forms that insurers can take are that of a cooperative society, public limited company, European Company or European Cooperative Society, or a mutual insurance association. Similarly, the possibilities for cooperative society shareholders to resign with repayment of their share in the capital were restricted.

In regard to the governance model, the dual structure specific to insurance undertakings was maintained. These undertakings still comprise a statutory management body (board of directors), responsible for strategy and supervision, and a management committee responsible for the actual management of the business. That committee is composed of at least three members, two of whom also have a seat on the board of directors.

Finally, this was the opportunity to cease requiring the presence of the chief risk officer on the management committee. EIOPA criticised that position via a peer review, owing to the implicit risks of a conflict of interests, notably because of the participation in the management committee's decision-making process which is, by definition, collegiate.

1 Directive (EU) 2019/2177 of the European Parliament and of the Council of 18 December 2019 amending Directive 2009/138/EC on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II), Directive 2014/65/EU on markets in financial instruments and Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money-laundering or terrorist financing.

II. Adjustments relating to transposition of Directive 2019/2177

There are four main components to the transposition of Directive 2019/2177. The first concerns the volatility adjustment, which aims to avoid procyclical investment behaviour. The amendment to Article 131 of the Insurance Supervision Law permits more frequent recourse to activation of the country component in the volatility adjustment mechanism. The second amendment now requires the prudential supervisory authorities to notify EIOPA of all requests for approval of an internal model for calculating the capital requirements.

In 2021, the European Commission published legislative proposals to strengthen the fight against money- laundering in Europe

The third series of amendments concern cross-border activities and introduce new information requirements. These new requirements are aimed at improving reciprocal information between the authorities of the home Member States and the host Member States on the activities that undertakings conduct outside their home Member State, particularly from the point of view of policy-holder protection. It is also possible for EIOPA to set up collaboration platforms to enhance the exchange of information in the same circumstances.

Finally, the fourth change concerns the procedure for approval of centralised risk management in insurance and reinsurance groups.

3. Cross-sectoral aspects

As a prudential supervisory authority, the Bank has jurisdiction over a range of spheres which cover several sectors and were therefore 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, and regulatory and prudential developments relating to the risks associated with climate change.

3.1 Prevention of money-laundering and terrorist financing

European Union

The European legal and regulatory framework

On 20 July 2021, in line with its May 2020 action plan for strengthening measures to combat money-laundering and terrorist financing (AML/CFT) in Europe, the European Commission published a set of ambitious legislative proposals for that purpose [1]. That set of proposals includes four separate, but closely linked, texts.

A first proposal for an EU Regulation on prevention of the use of the financial system for the purpose of money-laundering or terrorist financing (ML/FT) aims to define – with a view to full harmonisation at European level – the obligations with which the entities covered by this Regulation will have to comply regarding, in particular, internal organisation, vigilance and notification of suspicious transactions. When this Regulation enters into force, those obligations will take the place of the ones currently set out by national legislation on the subject in all Member States and, in Belgium, in particular, by the Law of 18 September 2017 on the prevention of money-laundering and the financing of terrorism, and limits on the use of cash.

A second proposal for an EU Regulation establishes a European AML/CFT Authority. This new European authority will be responsible for supporting the national financial intelligence units (FIUs) of the Member States with a view to enhancing their efficiency and cooperation. It will also take on the central role of the European system for supervising all entities subject to the AML/CFT rules ("obliged entities"), with the involvement of the national supervisory authorities. This second role will first include drafting the technical regulatory standards and guidelines which will be necessary to supplement the European legislative texts and to permit their effective implementation. In that regard, the AML/CFT powers currently exercised by the EBA will be transferred to this new European

1 See https://ec.europa.eu/info/publications/210720-anti-money-laundering-countering-financing-terrorism_en.

authority. The authority will also be responsible for direct exercise of the power of supervision over effective compliance with the AML/CFT obligations in the case of obliged entities whose characteristics are such that the effectiveness of that supervision is better guaranteed if it is conducted at European level. For that purpose, the authority will rely on the cooperation of the national authorities. In regard to obliged entities which are not selected to come under the direct supervisory powers of this European authority, however, it will also ensure the convergence of the national authorities' supervisory practices by exercising surveillance over their supervision activities. At first, the European authority's top priority will be to focus on the supervision of obliged entities in the financial sector, but the plan in the longer term is to reinforce its powers in regard to non-financial obliged entities, such as auditors, accountants, solicitors, lawyers, real estate professionals, traders in high-value goods (particularly diamonds), art dealers, gambling firms, etc.

A third proposal for a Regulation aims to revise the EU Regulation on funds transfers [1], essentially in order to extend its application to the transfer of cryptographic assets by providers of services relating to those assets.

Finally, taking account of the above, a new anti-money-laundering Directive will replace the current directive on the subject [2] and will define the arrangements that Member States must set up or maintain at national level for the prevention of ML/FT, particularly the rules to be respected in defining the duties, powers and operating arrangements of their FIUs and their national supervisory authorities in regard to AML/CFT.

The EU Council began examining these proposals as soon as they were published. The aim is to create the European authority in 2023. It is to begin operating on 1 November 2024, and at first will focus mainly on drafting the technical regulatory standards and guidelines necessary for the full application of the new European legal framework. It is to begin exercising its direct supervision powers in 2026.

Work of the EBA

The Standing Committee set up within the EBA to deal with issues concerning its AML/CFT powers (the AML Standing Committee) continued its work during the seven meetings chaired by a representative of the Bank which it held in 2021 with a view to adopting a large number of documents required to complete the European legal and regulatory framework on the subject, or in response to requests by the European Commission, the Council or the European Parliament. In some cases, the EBA undertook the drafting of such documents on its own initiative when that seemed necessary to promote convergence of the application of the AML/CFT rules. While most of those documents specifically relate to AML/CFT, others – drawn up in consultation with other EBA standing committees – aim to organise, clarify and facilitate cooperation between the national AML/CFT supervisory authorities and the prudential regulators, including the ECB acting under the SSM. The main documents are mentioned below.

Thus, on 1 March 2021, the EBA published its updated guidelines on the risk factors that credit institutions and financial institutions should take into account in their risk-based approach [3], followed on 3 March by its updated opinion on the money-laundering and terrorist financing risks concerning the European Union's financial sector [4]. Similarly, on 16 December 2021, the EBA adopted and published an updated, more detailed version of its guidelines on risk-based supervision [5].

In November 2021, the EBA also adopted its draft technical regulatory standards creating the central database for collecting data on significant weaknesses in the AML/CFT systems of the financial institutions identified by the national supervisory authorities and facilitating the exchange of information between those authorities or with other competent authorities, particularly prudential regulators, whenever necessary [6]. The draft technical regulatory standards were passed to the European Commission for their adoption,

1 Regulation (EU) 2015/847 of the European Parliament and of the Council of 20 May 2015 on information accompanying transfers of funds and repealing Regulation (EC) No. 1781/2006.

2 Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No. 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC.

3 See https://www.eba.europa.eu/regulation-and-policy/anti-money-laundering-and-e-money/revised-guidelines-on-ml-tf-risk-factors.

4 See https://www.eba.europa.eu/eba-highlights-key-money-laundering-and-terrorist-financing-risks-across-eu.

5 See https://www.eba.europa.eu/regulation-and-policy/anti-money-laundering-and-countering-financing-terrorism/guidelines-risk-based-supervision-revised

6 See https://www.eba.europa.eu/regulation-and-policy/anti-money-laundering-and-countering-financing-terrorism/regulatory-technical-standards-central-database-amlcft-eu.

publication in the Official Journal of the European Union, and entry into force.

On 5 January 2022, it also adopted and published an opinion based on a detailed report concerning de-risking [1].

In addition, the EBA developed guidelines on cooperation between the prudential supervisors, the AML/CFT supervisors and financial intelligence units in accordance with Article 117 (6) of the CRD. Those guidelines were adopted and published on 16 December 2021 [2].

Finally, the action taken by the EBA in response to the major incidents concerning AML/CFT which affected the European banking sector a few years ago, consisting in assessing the effectiveness of supervision over AML/CFT by each of the national authorities (peer review), continued in 2021 despite the disruption and delays caused by the public health crisis. In particular, in the summer of 2021, the EBA began assessing the supervision exercised by the Bank (see below).

The Bank's action on AML/CFT

In 2021, the Bank was closely involved in the European AML/CFT developments mentioned above.

Thus, in the Belgian delegation in the Council, the Bank makes a substantial, active contribution to the discussions on the legislative proposals of the European Commission mentioned above and the work of refining these legal texts, crucial for the future of AML/CFT and its supervision both in Belgium and throughout the European Union.

The Bank also actively supported the EBA's work described above, not only in chairing the AML Standing Committee but also in taking part in producing numerous draft technical regulatory standards, guidelines and opinions already mentioned in regard to AML/CFT.

1 See https://www.eba.europa.eu/eba-alerts-detrimental-impact-unwarranted-de-risking-and-ineffective-management-money-laundering-and.
2 See https://www.eba.europa.eu/regulation-and-policy/anti-money-laundering-and-countering-financing-terrorism/guidelines-cooperation-and-information-exchange-between-prudential-supervisors-amlcft-supervisors.

Similarly, the Bank takes part in the ongoing work of drafting the EBA guidelines on more specific aspects of the AML/CFT arrangements, such as the procedures for entering into remote business relationships with customers, in particular via the use of new technologies [1], and the AML/CFT compliance officer function in financial institutions [2].

Another point to mention is that, as part of the peer review, the EBA embarked on a detailed assessment of the Bank's internal organisation for the supervision of AML/CFT, its supervision methods and action taken in this field and the results obtained. The final conclusions of that assessment are not yet known. They will identify the strengths of the supervision system applied by the Bank, but also the aspects where improvements will be recommended. Once these conclusions are notified to the Bank, it will draw up an action plan in response to the EBA's observations.

The peer review conducted by the EBA will identify the strengths and the scope for improvement in AML/CFT supervision in Belgium

At Belgian level, in June 2020, the Bank took part in the creation of a public-private platform (the AML Platform) linking stakeholders in the financial sector and the public sector. Its members are professional associations in the financial sector, the Financial Intelligence Processing Unit (CTIF-CFI), the FSMA, the Bank and FPS Finance – Treasury – which provides the secretariat. The purpose of the AML Platform is to enhance the effectiveness of the measures to combat money-laundering, terrorist financing and the proliferation of weapons of mass destruction (AML/CFT) in Belgium via exchanges and consultation between the participants. The AML Platform, which meets at least once a quarter, takes its decisions by consensus. In accordance with the protocol signed by the participants, this platform is expected to facilitate and encourage the exchange of information between the participants. In particular, it will permit the provision of feedback on the application of the statutory AML/CFT obligations, notably those relating to the detection and notification of suspicious transactions. With due regard for the legal powers of the participating authorities, it will be able to propose guidelines for improving the operation of the AML/CFT systems.

On the subject of its organisation, the Bank continued its efforts to optimise its internal organisation, notably by refining and formalising its internal policies and procedures surrounding the implementation of effective risk-based supervision permitting the appropriate allocation of human and technical resources.

As regards the guidelines and recommendations that the Bank addresses to financial institutions, it took care to update the information which it publishes on its website concerning AML/CFT so that it continues to be a source of the most complete and up-to-date information possible for financial institutions concerning their legal and regulatory obligations.

The Bank also continued and finalised its discussions with representatives of the financial sector on the interpretation and practical application of the legal and regulatory obligations concerning AML/CFT in the context of private banking, and in particular in regard to the repatriation of funds from abroad. That work led to a Circular distributed to financial institutions and published on the Bank's website, stating that – with due regard for the clarifications supplied – the Bank expects financial institutions to ensure, via an internal audit assignment, that they have taken adequate measures to check the origin of the funds which they currently hold on behalf of their customers, taking account of the rules in force when those funds were received, and if necessary to take adequate measures to remedy any weaknesses identified in that respect.

Within the limits of its powers, the Bank also endeavoured to respond to the concerns raised by de-risking, which involves generic decisions by financial institutions not to establish, or to end, business relationships with categories of customers deemed to present high risks of money-laundering or terrorist financing. Those decisions are taken without any individual assessment of the risks associated with each of the customers concerned, taking account of their specific characteristics and the rules surrounding these business relationships which could reduce the level of risks involved. The Bank notes that, while decisions not to establish, or to end, a business relationship may conform to the AML

1 See https://www.eba.europa.eu/regulation-and-policy/anti-money-laundering-and-countering-financing-terrorism/guidelines-use-remote-customer-onboarding-solutions.

2 See https://www.eba.europa.eu/regulation-and-policy/anti-money-laundering-and-countering-financing-terrorism/guidelines-role-amlcft-compliance-officers.

Law's requirements, the de-risking of entire categories of customers without due consideration of individual customers' risk profiles is a sign of ineffective management of the money-laundering/terrorist financing risk and may have a significant impact, notably in denying access to banking services for the categories of persons concerned. In rejecting these customers, such de-risking decisions could cause the persons concerned to turn to unsupervised parallel financial networks so that these de-risking decisions may facilitate rather than prevent the laundering of funds from illicit sources. In that context, the Bank renewed the dialogue on this subject with the associations representing financial institutions. It aims to publicise its expectations and recommendations on the subject as soon as possible in order to help to minimise the adverse effects of de-risking for society in general. Thus, the NBB is specifying and implementing the EBA opinion on de-risking dated 5 January 2022 (see above), which is addressed to the national authorities and calls on them to take appropriate steps to end this phenomenon which has potentially undesirable social repercussions.

As regards the operational supervision of ML/TF, apart from continuing its work of systematising its risk-based supervision for all financial institutions under its authority, in 2021, the Bank invested particularly substantial resources in the effective, practical implementation of the joint guidelines of the European supervisory authorities (ESA) dated 16 December 2019 on cooperation and the exchange of information for the purposes of Directive (EU) 2015/849 between the competent authorities responsible for the supervision of credit institutions and financial institutions[1]. Those guidelines imply the creation of AML/CFT supervision colleges for every financial institution having branches or subsidiaries in at least two EU Member States other than the Member State where its head office is located. The purpose of these colleges is to increase and systematise the exchange of information and cooperation between the various national supervisory authorities concerned.

Apart from the resolution of interpretation issues concerning these joint guidelines, their implementation entailed mapping all the financial institutions subject to the Banks' supervisory powers in order to identify those institutions for which the Bank has to act as the lead supervisor, after which these colleges had to be actually set up. That also involves identifying all the other national authorities which have to be considered permanent members of the college, and the other Belgian, European and third-country authorities which it seems useful to invite to the college as observers. The effective operation of these colleges in a proper legal framework presupposes the preparation of written agreements on cooperation and the exchange of information, signed by the permanent members, and documents setting out the individual participation conditions which observers are to be asked to sign, taking account in particular of the need to respect the legal professional secrecy obligations which the various college participants must respect. On that basis, by the end of 2020, as the lead supervisor the Bank was able to arrange the first meetings of the colleges supervising the AML/CFT of 8 Belgian financial institutions, and it will continue its efforts in that regard in 2022. Over the same period, it also took part as a permanent member in inviting supervisory authorities of other Member States to the first meetings of the colleges supervising the AML/CFT of 30 financial institutions which also have establishments in Belgium and are subject to the authority of those lead supervisors.

Despite the significant efforts entailed in applying this cooperation arrangement between competent authorities, the Bank considers that it will permit greater account to be taken of the cross-border dimensions of financial institutions' activities, leading to the more effective and coordinated exercise of the supervisory powers of the various authorities concerned in regard to institutions conducting cross-border activities.

3.2 Developments in regulatory and prudential policy concerning risks relating to climate change

The risks relating to climate change are undoubtedly high on the agenda of supervisory authorities and central banks: climate change, the associated physical risks and the risks relating to transition to a more sustainable, low- carbon economy[2] may in fact have significant repercussions on the economy and on the stability of the financial system. That is why the prudential authorities are examining how to incorporate

1 See https://www.nbb.be/doc/cp/eng/aml/20191216_esa_joint_guidelines_cooperation_and_information_exchange_on_amlcft.pdf.

2 See the Bank's Financial Stability Report 2019 for more details on the various types of risk posed by climate change.

climate-related risks in the prudential regulations, and the supervisory authorities are making sure that financial institutions analyse, monitor and manage those risks. There are numerous initiatives in that regard at international, European and Belgian level.

International level

The Network for Greening the Financial System (NGFS) remains a key source of inspiration for regulators and supervisors. This is a body organising international cooperation between central banks and supervisory authorities with the aim of exchanging knowledge and experience on risks relating to climate change and the environment and on sustainable finance. The continuing development of methods and techniques for detecting, quantifying and reducing climate-related risks in the financial system is essential. In that regard the NGFS tries to ascertain more accurately the needs for specific data for analysing these risks and examines how to incorporate them in micro- and macro-prudential regulation and supervision. Finally, it also examines how central banks can contribute to the greening of the financial system. The NGFS has already published numerous reports on this subject. In 2021, for instance, it published a report on the importance of closing data gaps for improving the identification of risks relating to climate change[1] and a follow-up report for the supervisory authorities setting out guidelines for incorporating climate risks in their work[2]. The NGFS also continued drafting various scenarios on the subject of risks relating to climate change[3], which form a key source of inspiration for scenario analyses conducted at international level on the subject of these risks. They thus formed the basis for top-down scenario analyses conducted by the International Association of Insurance Supervisors (IAIS), EIOPA, the EBA and the ECB. The ECB's bottom-up test will also be based partly on the NGFS scenarios. The NFGS likewise published a report on the stress test exercises conducted and planned by the supervisory authorities[4].

The prudential authorities incorporate climate-related risks in prudential regulation and supervision

In 2021, the BCBS published two reports examining how climate-related risks are transmitted to the financial system[5] and how to measure them[6]. In November 2021, the Committee also published a consultative document containing some general principles regarding how these risks can be incorporated in Pillar 2 (assessment of firm-specific risks) of the Basel III framework[7]. Finalisation of the principles relating to the management and control of these risks will continue in 2022. The Committee is also examining whether Pillar 1 (minimum capital requirements) could be adapted to take better account of climate-related risks. However, it is important that these capital requirements are always based on the risks. Lower requirements therefore cannot be applied unless there is proof that the exposures concerned are less risky, while tougher requirements must be imposed for exposures highly sensitive to climate risks.

Work continued on the introduction of climate reporting under Pillar 3 (disclosure obligations) in order to ensure that banks throughout the world take uniform account of their climate-related risks. One of the major challenges facing the supervisory authorities is the lack of good quality, uniform, internationally comparable data for assessing these risks. That is why the BCBS supports the establishment of an International Sustainability Standards Board by the IFRS Foundation, which should permit a consistent and internationally comparable system of reporting on these risks.

Turning to the insurance sector, in May 2021, the IAIS – in addition to the activities of the NGFS – published a report[8] containing guidelines for the incorporation of climate-related risks in the supervision of the insurance sector. The report also describes some good practices by way of illustration. In September 2021, a second report was published on the impact of climate change on the investment and assets of insurance

1 NGFS progress_report_on_bridging_data_gaps, 26 May 2021.
2 NGFS progress_report_on_the_guide_for_supervisors, 26 October 2021.
3 NGFS Climate Scenarios for central banks and supervisors, 24 June 2021.
4 NGFS, Scenarios in Action, A progress report on global supervisory and central banks scenario exercises, 19 October 2021.
5 BCBS, Climate-related risk drivers and their transmission channels, 14 April 2021.
6 BCBS, Climate-related financial risks – measurement methodologies, 14 April 2021.
7 BCBS, Consultative Document – Principles for the effective management and supervision of climate-related financial risks, 16 November 2021.
8 IAIS, Application_Paper_on_the_Supervision_of_Climate-related_Risks_in_the_Insurance_Sector, 25 May 2021.

undertakings[1]. It is estimated that climate change will affect at least 48 % of European insurers' investment. This report also contains several scenarios for assessing the future implications of climate change. Although the losses revealed by the scenarios analysed are substantial, the insurance sector as a whole seems capable of absorbing them.

European legislation

In order to support the transition to a sustainable economy in accordance with the Paris Agreement on Climate, the European Commission launched various initiatives under its Sustainable Finance Action Plan. The aim is to stimulate investment in sustainable economic activities. Thus, the Commission drew up a taxonomy for classifying activities as sustainable or non-sustainable. It also devised various regulatory initiatives on data disclosure. The proposal for a Corporate Sustainability Reporting Directive (CSRD), to replace the Non-Financial Reporting Directive (NFRD), implies that large and/or listed companies and financial institutions will be required to report on the environmental and social implications of their business activities. In accordance with the Taxonomy Regulation[2], these companies must state the extent to which their activities can be considered sustainable pursuant to that taxonomy. A first Delegated Regulation which includes definitions of the activities which may be considered sustainable according to the climate goals was published in July 2021[3]. In addition, a series of regulatory technical standards were developed upon the proposal of the three European supervisory authorities (the EBA, EIOPA and the European Securities and Markets Authority or ESMA) in connection with the Sustainable Finance Disclosure Regulation (SFDR)[4] and the Taxonomy Regulation, which determine the information that financial market players must publish on the sustainability of their financial products. This legislation is an ambitious but crucial step aimed at protecting investors against greenwashing and enhancing financial market transparency. The requirements concerning environmental, social and governance risks (ESG risks) were also extended in the European Commission's recent CRD6/CRR3 proposal (see section B.1.3). ESG risks encompass a broader range of risks than just the ones relating to climate change. All environmental, social and governance issues which have a negative external impact on the financial performance or solvency of an undertaking, country or individual are called ESG factors. The ESG risks are therefore current or future financial risks

1 IAIS, Global Insurance Market Report, Special topic edition, The impact of climate change on the financial stability of the insurance sector, 30 September 2021.

2 Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

3 Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation, 6 July 2021.

4 Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector.

which arise from these ESG factors and which financial institutions may face in their exposures.

For the banking sector, the EBA has taken numerous initiatives in order to incorporate ESG risks in the prudential framework. For instance, it drew up technical implementing standards on the integration of these risks in Pillar 3[1]. It also published a report on the inclusion of ESG risks in risk management and prudential supervision, which will pave the way to a series of directives on that subject[2]. In addition, the EBA continues to examine the possibility of adapting Pillar 1 (minimum capital requirements) in order to take account of exposures to ESG risks. An interim report was due to be published on this subject at the beginning of 2022. The final report is expected at the end of 2023. In addition, the EBA conducted a sensitivity analysis on banks' exposures to climate-related risks[3]. On the basis of that analysis, banks are being urged to close their data gaps and speed up their reporting on ESG risks.

For the insurance sector, EIOPA conducted a study on how to include ESG risks in Solvency II. It expects the supervisory authorities to supply qualitative and quantitative data in the climate risk analysis that they conduct as part of their ORSA (own risk assessment)[4]. The European Union commssioned EIOPA to examine how natural disasters can be incorporated into supervisory practices, and EIOPA published a report on that subject in July 2021[5]. EIOPA was also asked to analyse the scope for taking account of a green supporting factor or a brown penalising factor by mid-2023.

The ECB published a report analysing how banks include climate-related risks in their risk management.

At the end of 2021, the ECB published a report[6] on the inclusion of climate risks in banks' risk management. The report contains the results of an analysis of the extent to which banks meet the expectations set out by the ECB in its guide to the management and disclosure of risks relating to climate and the environment[7]. That report describes various good practices, but it also mentions that specific, more ambitious measures are necessary to deal with current and future risks relating to climate change. In 2022, the ECB will conduct a bottom-up stress test concerning climate-related risks.

Initiatives by the Bank

At the end of 2020[8], the Bank published a Circular detailing its expectations concerning the collection and incorporation into risk management of data on the energy efficiency or real estate exposures. Those data must also be notified to the Bank for new mortgage loans.

In addition, the Bank is a member of numerous European and international working groups on ESG and climate-related risks, in which it helps to develop the regulatory initiatives and analysis exercises described above. The Bank also decided to consolidate its leadership at European level in this sphere by chairing the EIOPA working group on sustainable finance.

1 EBA, EBA draft ITS on Pillar 3 disclosures on ESG risks, 24 January 2022.
2 EBA, Report on management and supervision of ESG risks for credit institutions and investment firms, 15 October 2021.
3 EBA, Mapping climate risk: Main findings from the EU-wide pilot exercise, 21 May 2021.
4 EIOPA, Opinion on the supervision of the use of climate change risk scenarios in ORSA, 19 April 2021 and Consultation on Application guidance on running climate change materiality assessment and using climate change scenarios in the ORSA, 10 December 2021.
5 EIOPA, Methodological paper on potential inclusion of climate change in the Nat Cat standard formula, 8 July 2021.
6 ECB, The state of climate and environmental risk management in the banking sector, 22 November 2021.
7 ECB Guide on climate-related and environmental risks – Prudential expectations regarding risk management and disclosure, November 2020.
8 Circular NBB_2020_45 – Collection and reporting of data on the energy efficiency of real estate exposures, 1 December 2020.

C. Operational supervision

1. Banks

In 2021, the supervisory authorities continued to pay close attention to banks' credit risk in a still uncertain economic context. Supervision also focused on the sustainability of the banks' business model, against the backdrop of low interest rates and structural changes in the sector resulting, in particular, from the digital and environmental transitions.

1.1 Mapping of the bank and investment firm sector

The number of banks governed by Belgian law declined by one in 2021 with the deregistration of Santander Consumer Bank, which was absorbed by the Spanish bank Santander Consumer Finance. The number of branches increased by one: two new European Economic Area (EEA) branches were registered (Santander Consumer Finance and Joh. Berenberg, Gossler & Co KG) and one was deregistered. At the end of 2021, a number of applications for the registration of EEA branches were still being processed.

The number of Belgian investment firms again decreased by three. This time, it only concerned branches of investment firms governed by the law of another EEA member country.

In the euro area, banking supervision is exercised by the SSM, backed by cooperation between the ECB and the national supervisory authorities. The ECB exercises direct supervision over all significant institutions (SIs) and is assisted in that by the national supervisory authorities. The latter continue to exercise direct supervision over less significant institutions (LSIs), though the ECB retains the option of assuming direct supervision over those institutions if that is justified for the consistent application of its supervision standards.

As regards SIs, in 2021, the Bank formed part of eleven Joint Supervisory Teams (JSTs), which – under the direction of the ECB – supervise significant Belgian institutions, whether Belgian banks owned by a Belgian parent company, SSM-relevant Belgium-based subsidiaries of a non-Belgian parent company,

Table C.1

Number of institutions subject to supervision

(end-of-period data)

	2020	2021
Credit institutions	102	102
Under Belgian law	31	30
Branches governed by the law of an EEA member state	46	47
Branches governed by the law of a non-EEA member state	6	6
Financial holding companies	8	8
Financial services groups	4	4
Other financial institutions [1]	7	7
Investment firms	28	25
Under Belgian law	14	14
Branches governed by the law of an EEA member state	13	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 C.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
AXA Bank Belgium	Byblos Bank Europe
Belfius	CPH
Degroof Petercam	Dexia (financial holding company)
KBC Group – KBC Bank, CBC	Crelan – Europabank
Non-Belgian SSM-member parent	Datex (financial holding company) – CKV
BNP Paribas Fortis, bpost bank	Dierickx-Leys
Beobank, Banque Transatlantique Belgium	ENI
ING Belgium	Euroclear (financial holding company) – Euroclear Bank
MeDirect Bank	FinAx (financial holding company) – Delen Private Bank, Bank J. Van Breda
Non-Belgian SSM member parent not governed by the law of an EEA member country	NewB
Bank of New York Mellon	Shizuoka Bank
	United Taiwan Bank
	Van de Put & C°
	vdk bank

Source: NBB.

or banks established in Belgium and owned by a non-Belgian parent company not subject to the law of an EEA member country. Following the absorption of the Belgian Santander Consumer Bank by a Spanish bank belonging to the Santander group and its conversion into a branch, the Bank will no longer take part in the work of the JST in charge of supervising this banking group under the SSM. The number of JSTs involving the Bank was thus reduced to ten at the end of 2021.

Close attention continues to focus on credit risk management within the banks

The group of Belgian LSIs comprises 17 local and/or specialist banks. That number rises to 25 if the Belgian and foreign financial holding companies of less significant institutions are included.

1.2 Supervision priorities

In view of the uncertainty created by the public health crisis regarding the situation of firms, particularly those operating in the sectors affected by compulsory closures, the SSM and the Bank continued to pay close attention to the credit risk situation and the management of credit risk by the banks.

One of the key points for attention concerned assessing credit institutions' ability to detect at an early stage any counterparties whose credit risk has increased significantly on account of the health crisis. This detection exercise is made more difficult by government support measures such as moratoria and public financial support, which in the short term may conceal the real problems that firms may encounter in meeting their credit commitments. In this context, the supervisory authorities conducted a horizontal analysis of credit institutions' practices in order to detect firms whose credit risk has risen significantly and which may no longer be viable, taking account of the ending of the public support measures, as well as classification and provisioning practices such as those specified by the IFRS 9 accounting standard. On that basis, the supervisory authorities sent recommendations to the credit institutions in which such weaknesses were identified.

The second point for attention was to ensure that credit instutions maintain a comfortable capital position, particularly since there is still some uncertainty surrounding the economic recovery, and since termination of the government measures adopted in 2020 may ultimately have repercussions on businesses and households. Thus, credit institutions were subjected to a stress test coordinated by the EBA to assess their ability to withstand a serious deterioration in the economic situation (see box 9). On that basis, recommendations under Pillar 2 (P2G) were issued to participating credit institutions and – where appropriate – to some of their major subsidiaries. Similarly, the supervisory authorities continued to ensure that credit institutions remain cautious regarding their dividend distributions to shareholders and variable remuneration. Since the supervisory authorities lifted the ban on dividend payments at the end of September 2021 (see section B.1.1.2), particular attention focused on the ability of credit institutions to meet the regulatory requirements continuously in the future, following the lifting of that ban.

BOX 9

2021 stress tests by the EBA and the Bank

In 2021, the EBA coordinated its biennial stress test involving 50 of the biggest banks in the European Union (EU), 38 of which – including Belfius and KBC Group – are subject to the ECB's direct supervision. ING Belgium and BNP Paribas Fortis took part in the exercise via their parent institutions.

The aim of the EBA stress test is to give supervisory authorities, banks and market participants a common analytical framework for comparing and assessing the resilience of the big banks in the face of a hypothetical adverse economic shock. The stress test comprises a baseline scenario and an adverse scenario, both over a three-year horizon. The assumptions concerning the macroeconomic variables in the baseline scenario are in line with the December 2020 economic projections published by the ECB. The adverse scenario, designed by the ECB and the ESRB, is based on assumptions reflecting the systemic risks deemed to represent the greatest threats to the stability of the EU banking sector at the start of the stress test in January 2021. Since the stress test's adverse scenario is hypothetical, the estimated impact of that scenario should not be regarded as a prediction of banks' profitability. Furthermore, the results take no account of any response to the shocks by the banks, since the stress test is based on the assumption of a static balance sheet. The stress test does not have any "pass/fail" threshold. It was designed for use as a significant contribution to the Supervisory Review and Evaluation Process (SREP), which forms the basis for determining additional capital requirements specific to each institution.

Two Belgian banks – KBC and Belfius – were put through the EBA stress test. The starting CET1 capital ratios (reported at the end of 2020) stood at 17.6 % for KBC and 16.4 % for Belfius. These values exceeded the average starting value of 14.7 % for the sample of euro area banks. In the adverse scenario, KBC and Belfius proved more resilient than most other euro area banks. In that scenario, KBC exhibited a 351 basis point deterioration in the CET1 capital ratio, while for Belfius that ratio was down by 270 basis points. By way of comparison, the average decline for euro area banks was 497 basis points. The CET1 capital ratios projected for 2023 in the adverse scenario thus came to 14.1 % for KBC and 13.7 % for Belfius, or well above the average ratio of 9.7 % projected for the euro area in 2023.

The starting positions of the two Belgian banks and their performance in the stress test are partly attributable to the continuing impact of the adjustments that those banks have made in recent years, including the strengthening of their solvency position, control of their operational expenditure and the provisioning efforts made during the COVID-19 crisis.

LSIs, which are subject to the Bank's supervision, are also put through a stress test on a regular basis. Since the results of these stress tests form a contribution to the SREP, the Bank decided that these two exercises would be held in the same year. During the year under review, the Bank conducted a stress test on nine LSIs. The scenarios and methodology were aligned with those for the EBA stress test, with the necessary simplifications. The desired proportionality was also ensured in that the LSIs were only asked to provide additional information on their starting position in December 2020, with the Bank taking on the task of producing projections for the years 2021-2023. The stress test results were not published but were discussed with the LSIs and helped to determine the additional capital requirements specific to each institution.

In addition, in view of the low interest rates and structural changes in the sector due to digitalisation, but also the need to adapt to the challenge of climate change, particular attention was devoted to assessing the sustainability of the business model and the banks' ability to respond to these developments. Thus, the impact of the persistently low interest rates on the revenues of Belgian credit institutions was assessed and their strategic plan was analysed to ensure that they were taking the necessary measures and actions (see box 10). On the subject of the impact of climate risk on credit institutions, the ECB conducted an initial examination of the state of preparations in major credit institutions. It showed that the sector saw climate risk as a factor which could have a significant impact on their business in the future, but also that a great deal still needed to be done to grasp and manage this risk properly in accordance with the requirements laid down by the ECB [1]. The credit institutions concerned were informed of the weaknesses discovered and were asked to take corrective measures. In 2022, the ECB will conduct a stress test exercise to assess the impact of climate and environmental risk on the sector.

1 ECB, The state of climate and environmental risk management in the banking sector, 22 November 2021.

BOX 10

Impact of the prolonged low interest rate environment and other factors on the business model of Belgian banks

This year, in its periodic analysis of the business models of credit institutions, the Bank focused on the impact of persistently low interest rates, digitalisation and the coronavirus crisis. This was a two-phase exercise: the first phase involved analysing the sustainability and viability of the banks' business model and the second concerned discussing the findings of that analysis with the most affected banks.

The analysis assessed the institutions on the basis of six tests, three of which concerned the impact of low interest rates. In the first test, the sensitivity of the banks' interest margins and interest income was analysed over the years ahead, on the assumption of continuing low interest rates. A second, more extensive macroprudential test also took account of factors such as the cost-income ratio and the search for yield. A third and final – microprudential – test examined the institutions' financial prospects on the basis of their strategic and financial plans, and their planned mitigating measures and risk appetite. In addition, the potential impact of the coronavirus crisis on the banks' balance sheet and capital buffers was analysed on the basis of two vulnerability assessments. Finally, there was a wide-ranging examination of the banks' activities and investments in regard to FinTech. Their strategic position on that subject was included in the general analysis (see also section D.2.3).

A prolonged environment of low, or even negative, interest rates has an adverse effect on banks' profitability, thus affecting the ability of some banks to build up sufficient capital reserves. The banks' risk profile may also change as a result of their quest for more profitable business, associated with different and potentially higher risks. The banks expect to take mitigating measures to improve their cost-income ratio, to apply negative interest rates to certain types of customer, or to increase the percentage of their total income derived from fees. The digitalisation of the banking sector and the financial world in general also entails substantial investments. In recent years, driven by technological innovations and changing consumer preferences, the financial sector has stepped up its digitalisation and the introduction of new processes, applications or products. The digitalisation initiated by major banks and a number of smaller niche banks has forced banks in general to become more ambitious.

The business model of smaller, less diversified banks seems to be under greater pressure in this context, so that some of those institutions should focus on particular niches, and try to form partnerships or achieve economies of scale.

2. Insurance undertakings

In 2021, the Bank continued to keep a close watch on the repercussions of the COVID-19 pandemic and maintained its increased surveillance of the financial situation of insurers and reinsurers subject to supervision. The financial markets, which have a significant impact on the financial health of businesses, recovered while the technical impact of insurance on most businesses remained limited. Combined with the low interest rate, the health crisis continued to put pressure on life insurance activities, prompting the Bank to impose special measures on a number of undertakings during the year under review. In 2021, attention also focused on outsourcing and record keeping, and on new businesses. In addition, the Bank conducted a relatively large number of horizontal analyses. That work focused in particular on the adequacy of technical life and non-life provisions and on the role of the actuarial function in that sphere, the profitability of the life insurance business, reinsurance and cyber risks (see section D.2.3 on that last subject).

2.1 Mapping of the sector

At the end of 2021, the Bank exerciseed supervision over 72 undertakings, and seven branches of undertakings governed by the law of another EEA member country. In the case of those branches, supervision was confined 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 undertakings subject to the Bank's supervision are reinsurers in the strict sense.

The number of Belgian insurance groups subject to the Bank's supervision remained stable, at ten. Seven of these groups only have holdings in Belgian insurance undertakings (national groups), and three of them have holdings in at least one foreign insurance undertaking (international groups). Owing to the entry of new players on the market following Brexit, the Bank was represented in more supervisory authority colleges than previously.

The expectation is that more undertakings will set up business in Belgium in the near future. The Bank has been contacted multiple times by firms intending to begin operating in Belgium.

Table C.3

Number of undertakings subject to supervision

(end-of-period data)

	2020	2021
Active insurance undertakings	64	62
Insurance undertakings in run-off	0	0
Reinsurance undertakings	30	31
of which:		
Undertakings also operating as insurers	28	29
Other [1]	8	8
Total [2]	74	72

Source: NBB.
1 Surety companies and regional public transport companies.
2 The total only takes account once of undertakings active as both insurers and reinsurers.

Table C.4

Belgian insurance groups subject to the Bank's supervision

Belgian national groups	Belgian international groups
Belfius Assurances	Ageas
Cigna Elmwood Holdings	Navigators Holdings (Europe)
Credimo Holding	KBC Assurances
Fédérale Assurance	
Groupe Patronale	
Securex	
PSH	

Source: NBB.

Table C.5

Colleges for insurance undertakings subject to the Bank's supervision

The Bank is the group's supervisory authority	The Bank is one of the supervisory authorities	
Ageas	Allianz	Allianz Benelux
		Euler Hermes
KBC Assurances	AXA	AXA Belgium
		Inter Partner Assistance
Navigators Holdings Europe		Yuzzu Assurances
	Assurances du Crédit Mutuel	Partners Assurances
		NELB
	Munich Re	D.A.S.
		Ergo Insurance
		DKV Belgium
	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

Source: NBB.

2.2 Supervision priorities

New businesses

In 2021, the Bank approved one new insurance undertaking. This new entrant is an additional player in the international undertakings sector, as its business model involves the use of Managing General Agents to conclude contracts in other countries; this sector has developed in Belgium in the wake of Brexit. Supervision of these international undertakings implies specific supervision priorities, including the continued monitoring of outsourcing, the monitoring of activiities developed in other countries and a minimal presence in Belgium. The Bank paid particular attention to these aspects in 2021. Initial discussions also began in 2021 concerning the approval of new InsurTech undertakings. These initiatives – which also give rise to particular prudential concerns – will continue in 2022.

Outsourcing

For a number of years now, insurers and reinsurers have increasingly resorted to outsourcing, for various reasons: (i) greater efficiency, (ii) access to specific expertise not available in-house, and innovative solutions and/or (iii) a need for flexibility and scalability. With constantly expanding digitalisation of operational processes and interfaces, recently accelerated further by the COVID-19 pandemic, that trend intensified in 2021.

Thus, in 2021, the Bank received twice as many notifications of critical outsourcing as in previous years. They mainly concerned: (i) information technology infrastructures, (ii) document storage, very often via clouds (implementation of Circular NBB_2020_18 on cloud computing and the Bank's Regulation published in the *Moniteur belge/Belgisch Staatsblad* of 11 September 2020 concerning the storage of insurance documents outside the undertaking's registered office), and (iii) underwriting (change relating to the recent presence on the Belgian market of international insurance undertakings whose business model is based on the use of Managing General Agents).

Analysis of these notifications led to identification of new risks, such as an increased risk of concentration (notably in the IT sphere), greater interdependence with new types of company (such as centralised service companies, unregulated companies created increasingly frequently in insurance groups) and heightened risks concerning "vendor lock-in", data loss and compliance. Monitoring outsourcing therefore became a supervision priority for the Bank. Thus, various projects were implemented in 2021 to strengthen that supervision (new forms of reporting, horizontal analysis, detailed analysis of certain types of outsourcing, direct inspection of service providers, etc.). These projects will continue in 2022.

Wider use of outsourcing creates new risks for insurers

During the period under review, outsourcing was a central theme of the inspections conducted in insurance and reinsurance undertakings. During the inspections, there was particular emphasis on the assessment of how the outsourcing was organised in the pre-contract, contract and post-contract phase. Particular attention focused on the adequacy of the internal control system, and especially the methods of selecting and assessing sub-contractors and the involvement of independent oversight functions. In that respect, insurers and reinsurers must ensure that they have efficient, objective tools such as performance indicators permitting proper assessment of the quality of the outsourced services.

In the face of increasingly widespread outsourcing by insurers and reinsurers for critical or important functions such as independent oversight, claims management, underwriting or document storage, firms were also reminded that they remain ultimately responsible for the service ousourced. This means, for instance, that firms must set up the measures necessary to ensure access to relevant data and documents within a reasonable timeframe.

In response to the Bank's request for more substance (significant presence) in the case of an undertaking which the Bank had approved as an insurer in Belgium and which made extensive use of outsourcing, some undertakings suggested the joint employment contract (JEC). This arrangement implies that workers are bound simultaneously be a contract of employment with the Belgian insurer and with another undertaking in Belgium or in another country. It can only be accepted as a way of giving more substance to the insurance undertaking approved in Belgium if these workers are actually employed under the usual employment contract conditions: line of reporting to the management bodies of the Belgian company, effective supervision by that undertaking of the work done, annual appraisal by the bodies of the Belgian

undertaking and the latter's right to terminate the contract of employment at any time if failures are identified, etc.

Non-life insurance technical provisions

During 2021, the Bank brought together all those responsible for actuarial functions on the Belgian market in a virtual workshop on the subject of horizontal supervision of the level of non-life technical provisions (Solvency II standard). This workshop provided an opportunity to explain to the sector how the data submitted via prudential reporting are used for supervision purposes. At this meeting, a questionnaire for the attention of those responsible for the actuarial function was also presented and discussed. It aimed to clarify the nature of some of those data in order to improve the analytical processes in which they are used.

Life insurance

For some years now, life insurance undertakings have conducted their business in an environment featuring persistently low interest rates. In order to cope with the reduction in earnings from fixed-income investment, the interest rate guarantees on life insurance have steadily diminished. The question is whether the two changes mirror one another or whether there is structural downward pressure on the profitability of life insurance.

An initial horizontal analysis showed that the gap between recurring financial income and the average guaranteed rates on life insurance had not narrowed systematically over time : in general, the progressive reduction in the guaranteed interest rates parallels the decline in financial income.

The profitability analysis does not only take account of the financial result. There are other potential profit sources, such as the mortality result (if firms record fewer deaths than expected according to the mortality tables used for pricing) and the cost result (which is the difference between the loadings included in the premiums and the actual costs). The cost result is generally negative (and is usually offset by the financial result), but owing to the constantly rising life expectancy and hence chances of survival at a given age, the mortality result generally represents a key source of profits for life insurance undertakings.

These profitability analyses supplement the horizontal analyses of reported technical provisions which are conducted periodically (under both the Belgian accounting standards and Solvency II).

In regard to the impact of the health crisis on undertakings' profitability via mortality, the vast majority of the deaths occurred in the non-insured age groups. Since death cover usually ends at retirement age, the excess mortality had no negative impact on profitability.

Reinsurance

On reinsurance, the Bank notes the emergence of innovative practices in the reinsurance of life insurance portfolios. Reinsurance is used as a tool to mitigate market risks, particularly the interest rate risk. That could prove attractive for undertakings holding life insurance portfolios with high guaranteed interest rates. While the reinsurance agreement does actually attenuate certain risks, the Bank is aware that these schemes generate other risks, essentially owing to the significant and immediate impact of this type of reinsurance on the solvency capital requirement (SCR) of supervised companies. The work done led the Bank to define a set of internal guidelines and develop supervision tools intended, for example, to limit the connection between the reinsurance agreement and compliance with the regulatory solvency requirements.

The various (non-exhaustive and non-exclusive) measures that may be taken include : (i) limiting the assignment rate (quota share treaty) ; (ii) recommending the establishment of robust collateral arrangements, (iii) insisting that the treaties include deterrent penalties for the reinsurer in the event of unilateral cancellation ; or (iv) asking the undertaking to define, in its risk appetite, an SCR ratio offering additional scope to cover the risk of dependence on the treaty.

BOX 11

2021 stress tests by EIOPA and the Bank

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[1], and that test is aligned, where appropriate, with the European stress test. In 2021, EIOPA conducted a European stress test to assess the impact of an adverse scenario on the participants' capital (solvency margin) and liquidity. Two Belgian insurance groups took part in that European exercise from the capital angle, while three individual undertakings forming part of those two groups took part in the liquidity scenario. In addition, the Bank applied the same capital stress test to a series of individual insurers together making up a significant proportion of the Belgian insurance sector.

The 2021 stress test scenario was devised jointly by EIOPA and the ESRB and reflects the ESRB's assessment of the main risks for the European financial system. Its principal objective was to identify and assess the insurance sector's potential vulnerabilities resulting from a persistently low interest rate environment combined with the possible worsening of the COVID-19 pandemic. That took the form of a series of specifc shocks affecting market risks and insurance risks which had a severe but plausible dual impact on the insurance sector. The reference date for this exercise was 31 December 2020.

The scenario therefore affected both the assets and the liabilities of firms, owing to the combination of an environment with declining risk-free yield curves, shocks in key investment portfolio asset classes, and a bigger- than-expected rise in mortality and claims in certain non-life insurance branches. That scenario does not only form part of the Bank's framework for assessing the macroprudential risks, it also enables identification of any risks that might exist at microprudential level.

The average solvency ratio (SCR ratio) of the 14 Belgian firms taking part in the test was 190 % before application of the shocks, suggesting a comfortable starting position. After taking account of these shocks, the average SCR ratio dropped by 67 percentage points to 123 %. The fall was due mainly to the decline in the value of the investment portfolio, particularly bonds and equities (negative impact of 38 and 31 percentage points respectively on the SCR ratio). That fall was partly attenuated by the compensatory effects relating to certain assets and liabilities on the balance sheet, such as the hedging strategies via derivatives that some insurers use, which reduce the impact of the shocks. For the first time in a stress test, insurers were also able to apply post-shock management measures which had a positive effect of 21 percentage points on the post-stress-test ratio. The results of this stress test at Belgian level were published on the Bank's website[2] and the European results are available on EIOPA's website[3].

Finally, in parallel with the EIOPA stress test, the Bank also developed its own "low-yield" scenario which measures how a continuing decline in the risk-free yield curve would affect the solvency of

1 In 2020, following the outbreak of the COVID-19 pandemic, the Bank concentrated its supervisory and regulatory measures on essential, critical tasks concerning the monitoring of the impact of the COVID-19 pandemic on insurers. So, the national stress test scheduled for 2020 was cancelled.

2 See https://www.nbb.be/en/financial-oversight/prudential-supervision/areas-responsibility/insurance-or-reinsurance-38.

3 See https://www.eiopa.europa.eu/insurance-stress-test-2021_en#Publicationoftheresults.

Belgian insurers. The main aim of that scenario is to identify and assess the insurance sector's potential vulnerabilities resulting from a persistently low interest rate environment. The individual results are taken into account in assessing applications for exemption from creation of the flashing-light provision for interest rate risk.

3. Financial market infrastructures and payment services

The COVID-19 pandemic also affected the financial market infrastructures sector and payment institutions (for an overview, see the Annual Report 2020). This year, the Bank's supervisory activities were concentrated on human resources aspects. The next section goes into this in more detail. An exhaustive account of all the supervision activities concerning financial market infrastructures (FMIs) and payment services appears in the latest Financial Market Infrastructures and Payment Services Report, available on the Bank's website [1]. In the next edition of that Report to be published in June 2022, a thematic article will go into more detail on the Bank's supervision activities concerning digital operational resilience. Another article will examine the risks associated with the growing use of services and products linked to information and communication technology (ICT) provided by third parties. That report will also include a series of articles on the latest developments concerning digital ledger technology (DLT)/blockchain and the European "DLT pilot regime" for the trading and settlement of "tokenised" securities [2]. Finally, several articles will deal with the subjects of crypto-assets and central bank digital currencies from the point of view of the Bank as a supervisory authority and overseer responsible for financial stability.

1 See www.nbb.be/fmi.

2 "Tokenised" securities are the digital representation via DLT of securities which exist outside the blockchain.

3.1 Mapping of the sector

The Bank is responsible for both the oversight and the prudential supervision of institutions in the post-trade sector and payment services. Oversight mainly concerns the security of the financial system, whereas microprudential supervision examines the security of the operators offering these services. In cases where the Bank exercises both oversight and prudential supervision, these two activities can be considered complementary.

The table below presents the systems and institutions subject to the Bank's supervision or oversight. As well as being classified according to the type of services provided, these institutions are also grouped according to: (a) the Bank's role (namely prudential supervision authority, overseer, or both) and (b) the international dimension of the system or institution (the Bank as the sole authority, international cooperation agreement with the Bank as the lead authority, or other role for the Bank).

Table C.6

Mapping of the financial market infrastructures and payment services sector

	International cooperation		The Bank acts as the sole authority
	The Bank acts as lead authority	The Bank participates in the supervision, under the direction of another 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 depository (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 processor and payment institution Worldline SA/NV
Oversight	Critical service provider SWIFT	Other infrastructure TARGET2-Securities (T2S) [1]	CSD NBB-SSS
	Payment system Mastercard Clearing Management System [2]	Payment system TARGET2 (T2) [1] CLS	Card payment schemes Bancontact [1] Mastercard Europe [1] Maestro [1]
			Payment processors Mastercard Europe equensWorldline
			Payment system 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).

Table C.7

Number of payment institutions and electronic money institutions subject to supervision

(end-of-period data)

	2020	2021
Payment institutions	38	39
Under Belgian law	33	34
Limited status institutions [1]	0	0
Foreign EEA branches	5	5
Electronic money institutions	8	7
Under Belgian law	7	6
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 Law of 11 March 2018 and are subject to a limited regime.

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

Belgium has 46 payment institutions and electronic money institutions, including European branches.

During the year under review, the Bank was again frequently approached by new applicants offering a large number of new business models. That implies that the number of institutions could increase next year.

3.2 Supervision priorities

One of the Bank's main supervision activities in 2021 consisted in implementing the requirements relating to rules on strong customer authentication (SCA) and common and secure communication (CSC) between payment service providers (open banking) on the Belgian market.

As described in more detail in chapter D on digitalisation, in 2021, the Bank also pursued its operational activities and its strategic activities concerning cyber risks and IT risks. In that connection, a number of inspections were conducted in market infrastructures and payment institutions, a number of payment institutions were asked to complete a questionnaire on IT risks, and there was more frequent monitoring of institutions' activities. Regarding policy, the work of the EU Council's working group on the European Commission's proposal for a Digital Operational Resilience Act particularly merits a mention.

In 2021, the Bank also set up the National Retail Payments Committee (NRPC) and continued to analyse the impact of the CRD5 on the Euroclear group.

In addition, the Bank acting jointly with the ECB took the lead of a group of Eurosystem central banks which prepared the enhanced oversight regime for Mastercard Europe.

Finally, this section also examines in more detail the effects of the COVID-19 pandemic on the ability of financial market infrastructures to attract and retain skilled staff.

Strong customer authentication and open banking

The Bank kept a close eye on the migration plan which progressed step by step towards full compliance with strong customer authentication for all card transactions, leading in May 2021 to the complete and successful implementation of SCA for online card payments.

With a view to the successful integration of the open banking environment required by law, a number of obstacles in the institutions' interfaces were pinpointed and the Bank took the necessary measures to enforce the law in the event of the market failing to remove these last obstacles.

Particular attention was also devoted to the requirements concerning the custody of funds received by payment service providers from payment service users, giving rise to expansion of the periodic reporting permitting horizontal analyses.

Focus on cyber resilience

The pandemic had the effect of speeding up digitalisation, particularly via the rapid pace at which firms had to make the necessary adjustments to their processes and systems in order to introduce or expand remote working. Less well-intentioned players, such as hackers and organised criminal groups, also seized this opportunity. That situation increases the relevance of the Bank's TIBER-BE (Threat Intelligence-Based Ethical Red Teaming Belgium) programme, in which controlled cyber attacks are carried out with the institutions. The starting point for these tests comprises scenarios devised on the basis of information on real, relevant threats obtained from the sector. The first cycle of tests will conclude at the beginning of 2022, and the positive response by the sector prompted the launch of a new cycle with an increased number of institutions concerned. Analysis of the implications of the Digital Operation Resilience Act (DORA) in the Threat-Led Penetration Testing (TLPT) also began in 2021. For more information on TIBER-BE and DORA, see chapter D below.

National Retail Payments Committee

In 2021, the Bank set up the NRPC whose activities focused on the following 4 areas via *ad-hoc* sub-groups:

a) Instant payments: Three years after their introduction in Belgium, instant payments represent only a minor percentage of transfers. The sub-group aims to understand the reasons for this limited usage and to examine measures that might encourage their adoption.
b) Central bank digital currency (CBDC): The sub-group aims to inform, consult and – if the Eurosystem decides to analyse the digital euro in greater depth and/or develop prototypes – to involve the various stakeholders in analysing the needs.
c) Cash: The sub-group assessed access to cash in Belgium with the aid of a model developed by the Bank. It took account of both the current situation and the outlook for the future.
d) Coins: This sub-group, chaired by the Treasury (FPS Finance), examines questions relating to the use of coins, in particular changes in the use of 1 and 2 cent coins following the introduction of rounding off.

Impact of CRD5

At the level of the Euroclear group, the analysis of corporate governance continued – particularly regarding the role of the financial holding company which has decision-making power within the group. Since the Belgian Law of 11 July 2021 transposed the fifth EU Capital Requirements Directive (CRD5) into the Belgian Banking Law, which provides for approval of the financial holding company with decision-making power in a banking group such as Euroclear, this analysis was necessary to understand which entity formed the group's decision-making centre and which entities were responsible for implementing such decisions.

Mastercard Europe

In 2021, the Bank in conjunction with the ECB took the lead of a group of Eurosystem central banks which prepared the enhanced oversight regime for Mastercard Europe. This enhanced regime follows the Eurosystem's May 2020 designation of Mastercard Europe as a systemically important payment system (SIPS). Analysis of the increased requirements began in May 2021 and is expected to be completed in mid-2022. In the meantime, the Bank of England has also recognised Mastercard Europe as a systemically important payment system for the British market. Discussions began between the Bank of England, the ECB and the NBB to determine whether a partnership should be set up for the exchange of information and, if so, in what form.

COVID-19 and its impact on the ability to attract and retain staff

During the various phases of the COVID-19 pandemic, the Bank took heed of the measures which the FMIs adopted to organise their activities so as to give priority to their workers' health without compromising the operational continuity of their critical services.

FMIs are already considering how they will organise their activities after the pandemic. In that regard, they have to take account of a number of risks relating, in particular, to the challenge of attracting and retaining skilled staff: those risks require careful management.

Organisation of the FMIs' work during the pandemic

Working from home became the norm in FMIs, too. In some cases, however, they opted to continue carrying out certain critical activities on site. That was the case, for example, regarding the management and monitoring of the data centres for which it was important, from the point of view of risk management, for control to continue to be based in a particularly secure environment. It was also considered that, in order to ensure operational continuity, work on critical systems could be carried out more quickly and with less impact on users if the team responsible continued to work on site. For these staff, the usual protection measures were applied: they were divided into two groups, present in alternate weeks, and had to respect the distancing rules and the obligation to wear a mask.

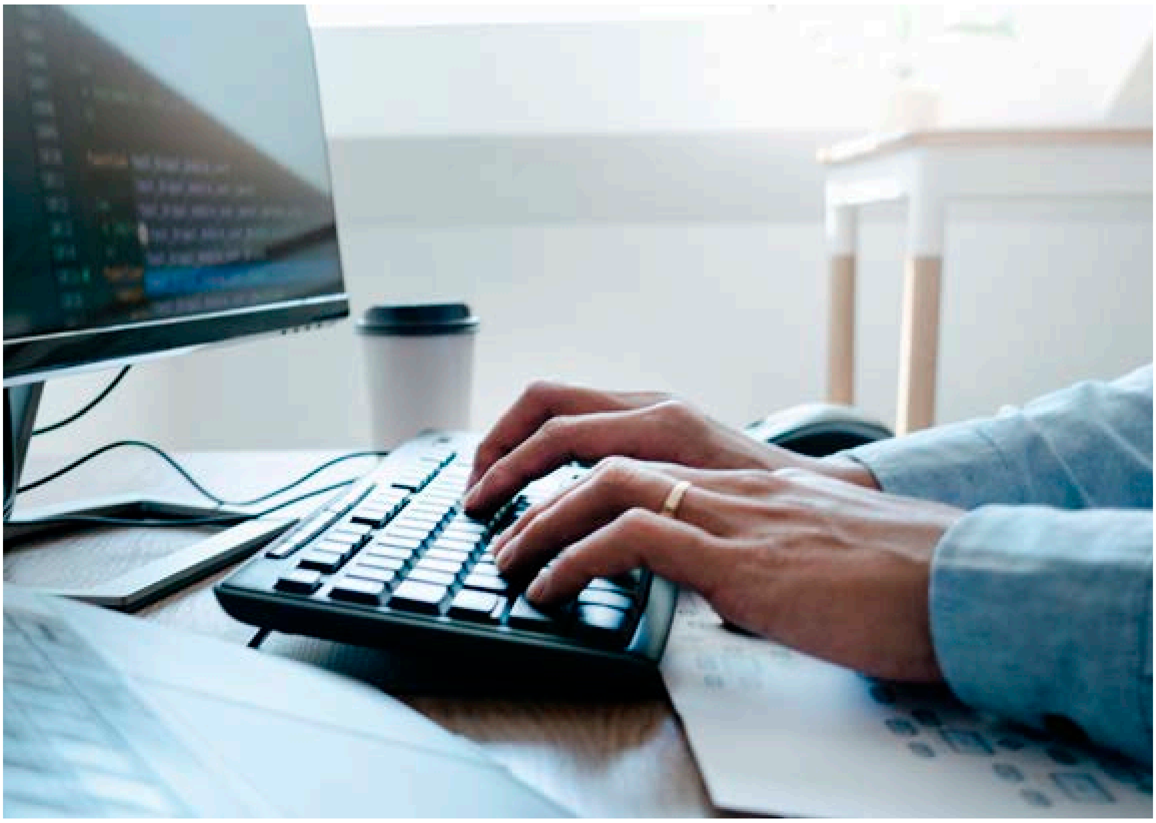
Monitoring of the rates of sick absence showed that they remained at the same fairly low level in FMIs and that, in most cases, they were actually slightly down against the figures for previous periods.

Challenges for the organisation of the work

Protracted working from home entailed significant adjustments in workers' behaviour. While that led to increased productivity, it also caused workers to suffer greater stress, some of them experienced motivation problems, and there was an increased risk of burn-out. Another point for attention concerned attracting new workers (from recruitment to talent development) and offering them the chance to expand their knowledge – including as regards the corporate culture – by means of informal networks within the organisation.

During the phase of the pandemic when restrictions could be eased and mandatory remote working could be gradually reduced, most FMIs continued to offer their workers the option of voluntary attendance at the workplace, either on one or more days a week or every day. This was conditional upon not exceeding the maximum presence in the office so that the health measures imposed by the government or by the FMI itself could be respected. During this phase, some staff were very reluctant to return to the office. They were not so concerned about safety in the workplace but more about the supposed risks of travelling between home and the office if they had to use public transport. It will be a major challenge for FMIs to meet the expectations of (some) staff regarding the health risks, on the one hand, while also regaining the advantages of physical presence (brainstorming, informal contact, innovation and collaboration, better understanding of non-verbal communication).

FMIs are already thinking about how they can maintain a hybrid form of working in the future (combining remote working with work in the office). Options for consideration involve, on the one hand, rearranging offices to take advantage of physical presence mainly for the exchange of ideas, and on the other hand, offering workers more flexibility (e.g. if they do not have a suitable environment for working from home). It is still too soon to make a



definitive statement on exactly how this new form of working will be maintained, but it is clear that a shift has occurred.

Fiercer competition for recruiting digital profiles

When the health measures were (temporarily) eased in the second half of 2021 and business resumed, there was an increase in economic activity, leading to a labour market revival and a rise in job offers. In addition, the compulsory switch to working from home due to restrictions relating to COVID-19 speeded up digitalisation in almost every sector of the economy. That boosted demand for digital profiles in all sectors, while most of the staff recruited by FMIs have such a profile.

Owing to accelerating digitalisation in practically all sectors, FMIs are struggling to recruit and retain IT specialists

A significant, potential risk for FMIs is therefore that on an overheated jobs market for digital profiles – which are in any case already in fairly short supply in Belgium – it may become harder to recruit and retain IT specialists. FMIs are therefore already considering how they can maintain an attractive working environment for their staff, including after the pandemic, and how they can respond to staff expectations concerning the organisation of the work and the balance between office-based and remote working. It could become increasing difficult to attract IT specialists prepared to work with "legacy" IT systems if there are job opportunities in growth sectors which make greater use of more modern information technologies and are regarded as more attractive. FMIs are aware of this challenge, and that explains, for instance, why they introduced "Agile" working methods, which generally lead to greater satisfaction and greater involvement of IT workers. An alternative solution for FMIs consists in opting for diversification in the tapped talent pools, such as geographical diversification involving work with teams of IT experts in locations other than the current main centres of activity.

D. Digitalisation

The digitalisation of financial services continued to gain importance in 2021, as it enables consumers, workers and businesses to cope with the challenges associated with the COVID-19 pandemic. Many trends are becoming apparent in terms of innovation. For example, there are new business models based on innovative payment solutions, the quest for operating efficiency via the use of machine/deep learning or robotic process automation, refinement of commercial strategies via data analysis and artificial intelligence, and the positioning of IT infrastructures and data aggregation in the cloud. These trends often reflect the aim of anticipating the fundamental changes expected in the structure of the financial services market, as the role of financial services and players is changing significantly at global level. There is a progressive shift towards a market in which financial and non-financial services are structured around integrated payment, e-commerce and social media platforms, with cooperative ecosystems covering these various aspects. These developments are facilitated in particular by the use of modular technologies enabling different financial and non-financial players to communicate via interfaces (application programming interfaces – APIs). Theinitiatives concerning global stablecoins which will facilitate payments in such ecosystems and platforms are taking shape.

Digitalisation is already having a major influence on the risks facing financial institutions and financial stability

These developments are already having a major influence on the risks facing financial institutions, and on consumers, monetary policy and/or financial stability. Since digitalisation leads to greater interconnectivity, (cyber) security and the continuity of the underlying systems and infrastructures are more crucial than ever. There is every indication that the risks inherent in digitalisation will only increase in the foreseeable future.

In that context, the European Commission proposed a digital strategy designed to boost digital innovation, creation of a single digital market in financial services and a European financial data area encouraging access to and sharing of those data. That strategy also aims to achieve better control of the risks resulting from digital innovation. In September 2020, it led to a series of European legislative initiatives in which the Bank was closely involved.

Two of them, relating to operational resilience and crypto-assets, are examined below. Other sections look at the implementation of open banking, governed by the second Payment Services Directive (PSD 2), and at the regulatory initiative aimed at defining harmonised rules on artificial intelligence, launched by the European Commission in April 2021. This chapter likewise deals with the action taken by the Bank to support the ECB's initiative concerning the digital euro, and the efforts made to map FinTech/InsurTech developments in supervised institutions and to limit the cyber risks and IT risks to which they are exposed.

1. FinTech

1.1 Open banking: access to payment account systems under PSD 2

One of the main supervision activities in 2021 consisted in monitoring compliance with the rules on FinTech players' access to payment accounts in credit institutions.

To ensure technical feasibility, credit institutions are required to create a technical access channel (dedicated interface) which FinTech players can use to offer their services. The specific technical requirements were defined by the technical standard for SCA (strong customer authentication)[1] & CSC (common and secure communication) , which came into force on 14 September 2019. Additionally, the EBA published an opinion in June 2020 on the obstacles in the dedicated interfaces and their elimination.

The Bank approved that EBA opinion and stated in a Communication dated 1 July 2020 that it was relying on this opinion for its interpretation of the ban on obstacles in the operation of the dedicated interfaces, and that it expected credit institutions to remove all hurdles from their dedicated interfaces by 31 December 2020.

The Bank has kept a close watch on this issue, but in the spring of 2021, on completing an in-depth analysis of the dedicated interfaces of each credit institution, it concluded that a number of obstacles still remained. That is why the Bank stipulated a deadline for the institutions concerned to remedy the situation. It is sure that most of these obstacles will be removed by mid-2022. It is also keeping a close eye on the interpretation of the current regulations on the subject, and providing additional technical information where necessary.

1.2 The digital euro

At the end of 2020, with its report on the digital euro, the ECB embarked on a detailed survey of the need to issue its own digital currency and how to proceed. In that context, experiments have already been conducted and a public consultation has been organised.

If the digital euro were to be launched, its aim would be to support the digitalisation of the European economy and to ensure its sovereignty in relation to foreign digital currencies or private means of payment. In view of the declining use of cash, at least in some Member States, this project could offer citizens an alternative way of ensuring access to central bank currency. That said, there is absolutely no question of discouraging or phasing out the use of cash. Nor is the aim to compete with the private sector. On the contrary, the idea is to promote cooperation with banks, payment institutions and other financial institutions.

The Bank is working with other euro area central banks on this project via the High-Level Task Force on Central Bank Digital Currency, a forum for discussing the main aspects relating to the design and characteristics of the digital euro. Indirect use is made of experts from within the Bank and outside. Various departments with experience in the sphere of cash and payments, macroeconomics, financial stability, technology and privacy protection, etc. are taking part in the project. To ensure that all stakeholders are involved in the project, the Bank keeps the private sector informed of its progress via the National Retail Payments Committee (NRPC – see section C.3.2).

1.3 Prudential treatment of crypto-asset exposures and draft European Regulation

Although the banks' crypto-asset exposures are currently limited, the expansion and continuing innovation of the market and services for these assets are arousing growing interest among banks. This could lead to new risks for financial stability and the banking system. In that context, on 10 June 2021, the BCBS launched a consultation on the prudential treatment of banks' crypto-asset exposures.

It proposes dividing these exposures into two groups according to certain characteristics of the crypto-assets :

- The first group concerns assets deemed eligible for treatment according to the existing Basel framework, subject to certain modifications and additional guidelines. That eligibility is determined on the basis of certain conditions relating in particular to the robustness of the stabilisation arrangements for stablecoins, and the legal framework of rights and obligations relating to the crypto-asset. This group is divided into two

1 Commission Delegated Regulation (EU) 2018/389 of 27 November 2017 supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council with regard to regulatory technical standards for strong customer authentication and common and secure open standards of communication.

sub-groups: crypto-assets representing tokenised versions of traditional assets[1], and stablecoins.

- The second group comprises assets which do not meet all the eligibility conditions in the first group. They will be subject to a new, conservative prudential treatment.

Owing to the evolving nature of these assets, a second consultation will be published during 2022. This initiative does not concern central bank digital currencies (CBDCs).

It should also be noted that, in September 2020, the European Commission had published a proposal for a Regulation on Markets in Crypto Assets (MiCA), which forms part of its digital strategy. With this Regulation, the Commission aims to provide a framework for crypto-assets which cannot be classed as financial instruments, electronic money, deposits, structured deposits or securitisation instruments, and for crypto-asset services not already covered by the rules in force (see section E.2.3 in the Report 2020).

1.4 Regulation and prudential expectations concerning the use of artificial intelligence

There have been various significant initiatives on the use of artificial intelligence.

On 21 April 2021, the European Commission published a proposal for a Regulation laying down harmonised rules on artificial intelligence (AI) in order to safeguard fundamental rights. It focuses the legislative effort on a small number of AI systems posing "high risks" for fundamental rights. In particular, this proposal provides for a preventive system which is based essentially on the establishment of compliance arrangements by suppliers of high-risk artificial intelligence systems and the supervision of those arrangements.

The proposal is not specific to the financial sector, though it does have a more tangible, immediate impact on lenders, as it considers that AI systems intended for assessing the solvency of individuals or to establish their credit rating are high-risk systems. Institutions deemed to be suppliers of that type of system will therefore be subject to additional obligations, such as the establishment of a risk management system, appropriate governance and data management practices, or human oversight.

AI system providers are covered by the draft Regulation if they develop an AI system or have an AI system developed in order to place it on the market or put it into service in their own name. However, there is an exception for AI systems put into service by small-scale providers and used exclusively by them.

Under the proposal, the Commission may, in the future, extend the list of high-risk systems to include other systems presenting a risk of negative consequences for fundamental rights, equivalent to or greater than the risk of negative consequences presented by the high-risk AI systems already identified. It is therefore possible that other systems such as certain specific systems used by insurers may ultimately be regarded as high-risk.

The EBA which, had already published a report in mid-January 2020 on the main trends in the use of big data and advanced analytics in the banking sector, has now concentrated on the use of machine learning for the purpose of the internal models used to calculate the regulatory capital for credit risk. Machine learning is used for various purposes in this context, such as validation, data quality improvement, or enhancing the model's predictive power. Thus, on 11 November 2021, the EBA published a consultation document on this type of use of machine learning. Among the problems associated with this type of use, the EBA mentions the interpretability and explainability of the results, complexity and governance, including knowledge and understanding of the model. The EBA proposes some recommendations in that connection.

1.5 FinTech survey and analysis for credit institutions

In 2017, the Bank launched a survey on FinTech and digitalisation covering a selection of banks and financial institutions. It provided a general picture of the impact of FinTech on the Belgian financial sector and facilitated the launch of a dialogue with market

1 The consultation document defines crypto-assets as "private digital assets that depend primarily on cryptography and distributed ledger or similar technology". Crypto-assets which represent tokenised versions of traditional assets are therefore those which use alternative means of recording the ownership of the traditional assets based on these technologies, rather than a central depository account.

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.

Since that first survey, financial technologies and the resulting business models have continued to evolve, and new technology-based financial services have emerged. Customer preferences are also constantly changing, making the digital provision of banking services ever more important. That trend was further reinforced by COVID-19. Finally, some regulatory initiatives such as PSD 2 (see above) have since come fully into force. In 2020, the Bank therefore decided to conduct a new survey to update its knowledge of developments in the field, to gauge the response of institutions to the problems pinpointed, and to continue the dialogue with the sector.

To that end, in the second half of 2020, the Bank sent out a second structured questionnaire on the impact of FinTech, asking participants about a number of general environmental aspects relating to FinTech and digitalisation, recent and future developments in business models and financial technologies in each institution, projects relating to certain FinTech applications and their maturity, and finally, the overall strategic vision concerning FinTech and digitalisation. At the beginning of 2021, the responses were analysed and, in some cases, clarified by the institutions concerned. The results of that analysis were shared with the sector during 2021 and published separately[1]. In general, the survey revealed that the banks had taken account of a number of best practices regarding organisation and governance identified following the first analysis in 2017. Thus, most banks have now included profiles with knowledge of digital technology and IT in their management bodies, and have taken steps to adapt their organisation in order to encourage and facilitate innovation. Nonetheless, many of them are having difficulty attracting the necessary talent to support the digital initiatives. Most institutions have also defined a strategic vision regarding FinTech and digitalisation. However, key indicators of actual performance providing a clear view of how this vision is translated into reality are often lacking. In practice, that is reflected in significant variations between institutions in terms of digital performance and the development of new, innovative or digital applications. It is also evident that the smallest banks are often positioned as "followers". There is a risk that the business model of some banks may come under pressure, not only because of competition from new players such as BigTech, but also because the banks which are farthest advanced along the road to digitalisation and the integration of FinTech solutions will set the bar higher for all players in the sector by providing a more appropriate and/or more effective response to customers' wishes.

The Bank sent out a new questionnaire to financial institutions on the impact of developments concerning FinTech/InsurTech

1.6 InsurTech survey and analysis for insurance undertakings

In a world where digitalisation is occupying an ever more prominent position, new technologies will also have a great influence on the insurance sector and on insurers' business model. That will open the way to financial innovation, but it will also lead to the emergence of new risks. In that context, the Bank conducted an initial analysis on the scope and impact of digitalisation in the insurance sector on the basis of the data at its disposal.

It found that both insurers and InsurTech firms were actively contributing to innovation on the Belgian market, and that more or less all aspects of the value chain were concerned, even if the effects are mainly felt in the distribution or underwriting of insurance policies and claims management. The Bank likewise found that an array of technologies was already in use, such as digital platforms offering existing or new services on line, or services using robotic process automation. Innovative technologies such as artificial intelligence are also used to improve pricing. The analysis showed that this development primarily affected the non-life branches (such as motor and fire insurance) and to a lesser extent health insurance and credit insurance.

To develop this analysis further, the Bank sent out a new questionnaire to the insurance sector to obtain more information on insurers' vision and

1 See www.nbb.be/fr/articles/la-banque-nationale-publie-une-nouvelle-analyse-de-la-transformation-numerique-dans-le.

strategy regarding digitalisation, new technologies, and the costs and potential benefits of using these technologies.

2. Digital operational resilience

2.1 Cyber risks and IT risks

The COVID-19 pandemic was again the dominant feature of the year in 2021. The financial sector has therefore long since switched to large-scale remote working. While widespread working from home does reduce the health risks, it increases the cyber risks and IT risks unless it is accompanied by supplementary measures and checks. For instance, the resolution of incidents is hampered not only because there are fewer operators physically present but also because of the large number of business computers simultaneously connected remotely to institutions via the internet. Finally, cyber criminals are likewise taking advantage of the new opportunities available to them in the pandemic situation. Fortunately, thanks to precautions taken by the institutions, there were no really serious operational incidents during the year under review.

Cyber attacks have become a daily occurrence worldwide in recent years

In recent years, cyber attacks had already become a daily occurrence throughout the world. At the same time, the attackers are evidently continuing to refine the techniques and methods that they use, making some of the attacks ever more sophisticated, powerful and/or extensive. The number of targeted, long-lasting cyber attacks is therefore set to rise further in the future, as the financial sector remains logically one of the potential targets. The think tank Carnegie Endowment for International Peace[1] lists the cyber attacks targeting financial institutions worldwide. That document indicates the current situation regarding cyber threats facing the sector. In 2021, the listed attacks aimed, for example, to steal sensitive data, disrupt systems and initiate fraudulent transactions. Reported cases often included the use of ransomware or (crypto)malware, denial-of-service (DDoS) attacks, and the exploitation of institutions' vulnerabilities, particularly their supply chains, and/or staff credulity.

Insurance and reinsurance undertakings and groups are in a special position, being vulnerable to cyber risk on two fronts: as institutions, they are subject to cyber attacks, but they also feel the impact of attacks on their customers, either via explicit cover (affirmative cyber insurance), or via implicit cover (silent insurance or non-affirmative cyber insurance). With the growing number of cyber attacks during the pandemic and the public's greater awareness of the possibility of being targeted, the Bank expects the growth of this cyber insurance market to gather pace.

Apart from cyber risks, the financial sector's heavy dependence on IT solutions also presents other challenges. Under pressure from innovative players, higher customer expectations regarding the services offered

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

and their availability, or growing security risks (e.g. by the use of end-of-life software which is no longer supported), traditional institutions are encouraged to renew their sometimes very obsolescent IT architecture in a fairly short space of time, but the complexity of their IT environment makes it a major challenge to achieve that under properly controlled conditions. There is likewise a high risk of growing dependence on third parties for IT services and other standardised IT system components. In particular, cloud solutions are increasingly being used, and for ever more important processes. That is also among the reasons why, at sectoral level, a small number of critical service providers present an ever-increasing concentration risk for the financial industry. The need for sufficiently extensive testing of software and recovery solutions to cover a range of extreme but plausible scenarios remains another key point for attention.

It is therefore important for the management bodies of financial players to have the necessary expertise and information to monitor the risks appropriately, and to incorporate adequate measures in their strategic planning to keep the risks within acceptable limits. However, many institutions state that they have difficulty in recruiting sufficient staff with the required skills and expertise. In addition, all the staff of those institutions must be aware of the cyber risks and IT risks in order to understand how those risks could arise and be ready to respond to them as expected.

2.2 Legislative guidelines and developments

In recent years, the Bank has made a substantial contribution to a regulatory framework designed to improve the control of cyber risks and IT risks. The prudential Circular on the Bank's expectations concerning the operational business continuity and security of systemically important institutions remains a key reference point. The Bank also makes an active contribution to establishing a European regulatory framework for the management of cyber risks and IT risks. Under the auspices of the EBA, this resulted in the publication of the EBA guidelines for supervisory authorities on ICT risk assessment under the SREP, guidelines on outsourcing arrangements, and guidelines on ICT and security risk management. Under the aegis of EIOPA, a comparable regulatory framework was likewise set up 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 meanwhile all become part of the Bank's supervision and policy framework. For payment systems and market infrastructures, the ECB's oversight expectations concerning cyber resilience are the benchmark. There have likewise been significant developments at global level. As stated previously in section B.1.2, in March 2021, the Basel Committee published new principles aimed at strengthening banks' operational resilience. Those principles are obviously highly relevant in a digital context. There is also a specific principle concerning ICT and cyber security.

In September 2020, the European Commission published a proposal for a Regulation called the Digital Operational Resilience Act (DORA). This proposal aims to mitigate the risks associated with the digital transformation of the financial sector by laying down strict, common rules on ICT governance and risk management, ICT incident reporting and information-sharing, security tests and risks relating to ICT third parties. These rules would apply to a wide range of financial institutions, but also to critical ICT service providers (third-party providers), such as cloud service providers, who would be subject to a form of oversight. As a member of the Belgian delegation, the Bank plays an important advisory role in discussions on draft legislative texts at European level and will probably also be closely involved in the subsequent development of technical standards.

2.3 Operational activities

Assessing cyber risks and IT risks and encouraging control over those risks are top priorities for the Bank, and European and international cooperation in that sphere is becoming increasingly important. Here, the Bank focuses on the security of individual financial institutions and FMIs and the confidence that they inspire, and on cross-sectoral control strategies.

The approach concerning individual institutions is two-pronged. On the one hand, institutions subject to prudential supervision are required to hold capital to cover their operational risks, including cyber risks and IT risks. Also, the operational security and robustness of the critical processes of financial institutions and FMIs are subject to close monitoring. The availability, integrity and confidentiality of the IT systems and data are crucial here. In 2021, the Bank conducted a number of inspections (for banks under the SSM) to check on compliance with the regulatory framework and the proper management of IT systems in relation to cyber risks and IT risks. In addition, it monitors these risks in financial institutions and FMIs in the course of its ongoing and recurrent supervisory activities. The COVID-19 health crisis obliged the Bank to revise its approach to these supervision activities. On the one hand, the content of the activities was adjusted to the new reality, with particular emphasis on COVID-19, while working methods were also adapted to give preference where possible to remote meetings and technological resources.

In 2018, the Bank established a framework for ethical hacking, known as TIBER-BE (Threat Intelligence-Based Ethical Red Teaming Belgium). This programme forms the Belgian part of a methodology devised by the Eurosystem and aims to boost individual financial institutions' and FMIs' cyber resilience by means of sophisticated tests, and to supply important insight into the cyber security of the Belgian financial sector as a whole. The Bank encourages these exercises in its capacity as the guardian of financial stability. In 2020, an updated version of the TIBER-BE framework was published on the Bank's website, in which the methodology is refined on the basis of the experience gained from tests already carried out. The sector seems convinced of the methodology used and the benefits offered by these specific tests. Meanwhile, the TIBER-BE team also successfully conducts cross-border tests, in close and effective collaboration with other EU countries which have implemented the TIBER framework, and with the UK, which has developed a similar framework, called CBEST. Nevertheless, the TIBER-BE programme is coming to the end of its first cycle and the experience gained is being actively incorporated into the reference framework for a second cycle which will begin shortly.

The Bank is also paying closer attention to sectoral initiatives. For instance, the SSM regularly conducts transversal analyses on cyber- and IT-related subjects and cybernetic aspects. In 2021, for example, all significant banks and some less significant banks were again asked to complete a questionnaire which is to provide important data on IT aspects for the annual SREP and will permit cross-sectoral analyses. A large number of insurance undertakings, investment firms, payment institutions and electronic money institutions were also asked to provide such information for a similar purpose.

The Bank used another questionnaire to ask the entire insurance sector in Belgium about various aspects of cyber risk, and informed the firms of the results of its analysis, particularly those implying a lack of control on certain points (see box 12).

BOX 12

Principal observations on the cyber risk questionnaire for the insurance sector

On the subject of cyber risk that companies in the insurance sector directly face, the Bank's analysis based on a questionnaire showed that:

- Cyber attacks most frequently target international and significant undertakings;
- International and significant undertakings understand the cyber risk better thanks to specific risk management frameworks and processes for collecting data and assessing the risk;
- Phishing e-mails are the most widely reported incidents in terms of frequency, but ransomware incidents are top of the list in the case of international undertakings.

The analysis also revealed that the cyber insurance market was still small in Belgium, with most undertakings not offering any cyber risk cover in 2019. Nevertheless, over the past four years, the Bank has seen this market expand.

Regarding cover for cyber risks, undertakings should be concerned about silent cyber risk (also known as non-affirmative exposure), i.e. the cyber risk implicitly covered by traditional non-life policies without insurers or reinsurers being aware of it. Insurance undertakings offering non-life cover that does not explicitly exclude cyber risk should revise their contracts in the future, because silent cyber risk cover can give rise to significant financial losses.

Qualitative methods are the commonest way of pricing cyber insurance, as quantitative approaches are difficult to implement owing to the lack of relevant data.

In its role as the sectoral authority for application of the law on the security and protection of critical infrastructures (principally systemic banks and FMIs), the Bank also assesses the effectiveness of the control systems of these critical financial infrastructures. In that context, the Bank likewise organises and coordinates periodic sectoral crisis simulation exercises in order to prepare the Belgian financial sector for potential operational incidents of a systemic nature. Under the law on network and information system security (NIS), the Bank acts as the sectoral point of contact for major incidents in the sector.

The Bank also takes part in various international working groups and forums to gain a better understanding of the risks which could become systemic for the financial sector and to examine mitigation measures. Other initiatives aim to promote the exchange of information between institutions, supervisory authorities, central banks, etc.

E. Resolution

The Bank exercises its mandate as the national resolution authority within the Banking Union, alongside the SRB and the resolution authorities of the other participating Member States.

The principal mission for the Bank, as the national resolution authority, is to contribute towards improving the ability of the Belgian and European authorities to resolve problems arising from the failure of a credit institution or investment firm under Belgian law. The role that these financial institutions play in that context is crucial as they carry primary responsibility for achieving this aim of resolvability.

A key element in this process is the setting by the resolution authorities of a Minimum Requirement for Own Funds and Eligible Liabilities (MREL) which all credit institutions must respect. In 2019 the regulatory framework concerning the MREL underwent significant modification with the adoption of the BRRD2[1]. The transposition of that Directive into Belgian law, which was finalised during the year under review, is among the most notable developments in 2021 in regard to resolution, since it entailed redefining the approach of the Bank and the other European resolution authorities to the calibration of the MREL.

Another feature of the year under review was the continuation of the specific conditions relating to COVID-19. Although those conditions necessitated some adjustments to the resolution authorities' requirements when the crisis erupted in 2020, e.g. postponement of some reporting requirements, they did not entail any special measures in connection with the 2021 cycle of resolution plans, even though the resolvability requirements are being tightened up year by year. That bears witness not only to the importance that all credit institutions attach to the work relating to resolution, but also to the institutions' capability in regard to operational continuity.

1. Legislative and regulatory framework

1.1 Transposition of BRRD2 and miscellaneous provisions

During the year under review, the provisions of the BRRD2 were transposed into Belgian law by the Law of 11 July 2021[2]. In addition, a number of adjustments were made to the provisions included when the BRRD was initially transposed[3]. First, the introduction of the concepts "resolution entity" and "resolution group" is an important new feature of the BRRD2. The group resolution plans must now identify, within a group, the entities to which the resolution authority expects to apply the resolution instruments in the event of failure, and those which should continue to operate without going into resolution. That distinction permits differentiation between single point of entry

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.

2 Law of 11 July 2021 transposing Directive 2019/878 of the European Parliament and of the Council of 20 May 2019, Directive 2019/879 of the European Parliament and of the Council of 20 May 2019, Directive 2019/2034 of the European Parliament and of the Council of 27 November 2019, Directive 2019/2177 of the European Parliament and of the Council of 19 December 2019, and Directive 2021/338 of the European Parliament and of the Council of 16 February 2021, and containing miscellaneous provisions.

3 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, and 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.

resolution strategies, in which it is generally only the parent company that goes into resolution, and multiple point of entry resolution strategies in which the resolution tools are applied to both the parent company and some of its subsidiaries, resulting in the break-up of the group.

In addition, the regulatory framework defining the MREL requirements underwent radical revision following up to the transposition of the BRRD2. Thus, the MREL requirement is now expressed as a percentage of both the total risk exposure amount (TREA) and the leverage ratio exposure (LRE) of the institution or entity concerned. This means that institutions or entities now have to satisfy simultaneously the levels set by each of these two calculations. Similarly, the rules on the subordination of the MREL instruments have been tightened up. Thus, alongside the existing category of global systemically important institutions (G-SIIs), a new category of large institutions has been created, namely "top-tier" banks with a balance sheet total in excess of € 100 billion. More prudent subordination requirements apply to this category of large institutions. In that connection, It should also be pointed out that the resolution authorities can apply the MREL regime for top- tier banks to institutions whose total assets are less than € 100 billion and whose failure would be reasonably likely to pose a systemic risk according to the resolution authorities (this is also known as the "fishing option").

Transposition of the BRRD2 into Belgian law was one of the most notable developments concerning resolution in 2021

The possibility for resolution authorities to impose a moratorium after the adoption of a resolution measure had already been included in the Belgian legislation following the transposition of the BRRD. With the transposition of the BRRD2, there is now also provision for a pre-resolution moratorium. In practice, the resolution authorities now also have the power to suspend certain contractual obligations for a limited period of no more than two working days before an institution or entity is placed in resolution, i.e. as soon as it is determined that the institution or entity is failing or likely to fail and there is no immediately available private sector measure which, in the opinion of the resolution authorities, could prevent the failure of the institution or entity within a reasonable timeframe. An additional condition specifies that the application of the pre-resolution moratorium must be deemed necessary to avert any further deterioration in the financial situation of the institution or entity. During this moratorium period, the resolution authorities may determine whether a resolution measure satisfies the public interest criterion, choose the most appropriate action, or ensure that one or more resolution tools are effectively applied. In cases where it is deemed desirable that the power to impose such a moratorium should also apply to covered deposits, the Belgian legislature made use of the option offered by the BRRD2 to oblige the resolution authorities to ensure that depositors have access to an appropriate daily amount of those deposits.

The BRRD2 also supplements the existing regulatory framework with a new article covering the situation in which the resolution authority considers that the first two resolution conditions are met (the institution or entity has defaulted or is likely to do so, and there is no other measure that could prevent its failure), but not the condition whereby resolution is necessary in the public interest. In that case, the BRRD2 stipulates that the institution or entity is to be liquidated in an orderly manner in accordance with the applicable national law. The transposition into Belgian law provides that, in such circumstances, the resolution authority shall, on its own initiative, notify the bankruptcy court by means of a summons. It is then for the court to decide on the insolvency conditions.

The existing regulatory framework was also revised in respect of the obligation on institutions to include bail-in recognition clauses in contracts or instruments creating liabilities which come under third-country law. Following the transposition of the BRRD2, it is now acknowledged that, in some circumstances, it may prove legally or otherwise impractical to include such provisions in some contracts. If that is the case, the institution or entity must notify the resolution authority which will then conduct its own assessment.

Finally, another significant adjustment concerns abolition of the prior judicial review and validation of the disposition decision of the resolution authority. That system is replaced by an *ex-post* judicial review. This adjustment aligns the Belgian legal framework with the regime applied in almost all the EU countries and implements a recommendation made by the IMF during the 2017 Financial Sector Assessment Programme

(FSAP)[1]. The possibility of appealing against a disposition decision or a resolution measure remains unchanged.

1.2 Revision of the bank crisis management and deposit insurance framework

The negotations on the revision of the bank crisis management and deposit insurance (CMDI) framework continued during the year under review. In the Bank's opinion, that revision which concentrates on the BRRD, the Single Resolution Mechanism Regulation (SRMR[2]) and the Deposit Guarantee Schemes Directive (DGSD[3]) is important for Belgium, as the CMDI initiative is one of the elements leading to completion of the Banking Union. Its aim is to assess the crisis management framework set up in 2014 in order to strengthen certain elements where necessary. In regard to resolution, the preparatory work has shown that two key elements could be addressed. First, the expectation is that a broader interpretation of the public interest test would improve the crisis management framework for small and medium-sized banks. Such a broadening of the public interest test is desirable in that, for most failing credit institutions, it would facilitate resolution within the existing Banking Union framework, under the SRB. Nevertheless, if such a broader interpretation were not possible, it would then be desirable to strengthen the normal insolvency framework by introducing transfer instruments for institutions whose resolution is not considered to be in the public interest. However, in that case the proposed system would need to be consistent and offer the minimum opportunities for potential arbitrage.

Second, the creditor hierarchy, and in particular the preference for covered deposits, could be revised. In a quantitative analysis conducted at the request of the European Commission[4], the EBA shows that, in the event of resolution, the ability of the deposit guarantee systems to intervene is still very limited in view of the super preference enjoyed by covered deposits. Similarly, owing to the intervention conditions of the Single Resolution Fund (SRF), in many cases it might be necessary to proceed with a deposit bail-in before the SRF can intervene. The quantitative analysis shows that introducing a general preference which would go beyond covered deposits to include all deposits, would permit speedier mobilisation of the national deposit guarantee systems and would also reduce the risk of uninsured deposits being included in a bail-in, thereby cutting the risk of exporting the banking crisis to the real economy.

A non-mutualised system of national deposit guarantee schemes is acceptable but could hardly be called an EDIS

This last point raises governance issues. If more of the resolution costs accrue to the national deposit guarantee systems, it becomes necessary for that to be reflected in the governance of the resolution mechanism, because the governance of the system cannot be based on centralised decision-making if the crisis costs are decentralised and borne by non-mutualised national deposit guarantee systems. It then becomes necessary to introduce a system of checks and balances ensuring that any decisions take due account of national interests.

One element of that balance will be determined by the characteristics of the future European Deposit Insurance Scheme (EDIS), and in particular the mutualisation of losses between national deposit guarantee systems. An ambitious EDIS providing for mutualisation of losses between national deposit guarantee schemes (DGSs) in the Banking Union, or even the creation of a single deposit guarantee scheme within that Union, is not essential to the smooth operation of the Banking Union as it stands. A non-mutualised system in which the only link between national deposit guarantee schemes is the option of providing credit lines on a mutual basis when necessary would probably be more realistic and widely acceptable, even if such a system could hardly be called an EDIS. In that connection, it should be noted that such a system

1 See the Annual Report 2017, section on Prudential Regulation and Supervision, pp. 183-184.
2 Regulation (EU) No. 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No. 1093/2010.
3 Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes.
4 See EBA replies to the European Commission's call for advice on funding in resolution and insolvency as part of the review of the crisis management and deposit insurance framework, 22 October 2021.

which would not introduce any loss mutualisation between national deposit guarantee schemes would be unable to bring about major changes in the existing balance between home and host countries because the system would remain essentially national. Loss mutualisation at the level of covered deposits is in fact necessary, but insufficient in itself, to ensure a group approach in the event of failure.

During the year under review the European Commission organised two public consultations in order to examine the framework. Its publication of a proposal for revision of the framework, initially scheduled for the fourth quarter of 2021, was postponed to 2022.

1.3 Proposal for a Directive establishing a framework for the recovery and resolution of insurance and reinsurance undertakings

In September of the year under review, the European Commission published a 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 (the "IRDD proposal" or the proposal for an Insurance Recovery and Resolution Directive [1]). This IRDD proposal, developed in conjunction with Solvency II (see sub-section B.2.3), aims to establish a recovery and resolution system for the insurance sector similar to the one that already exists for credit institutions and investment firms, and recently also for central counterparties (CCPs) [2]. The IRRD proposal obviously takes account of the specific nature of the insurance sector's activities. It covers the complete cycle of crisis management, from the preparations for a crisis situation to the resolution of an insurance or reinsurance undertaking.

In order to improve the crisis management preparations, the IRRD proposal – like the BRRD – provides for insurers and reinsurers to draw up recovery plans. These recovery plans have to examine the various available options for managing any crisis that occurs. In particular, the recovery plan determines what measures an insurer or reinsurer can adopt in the event of a serious crisis. Those measures aim to restore the financial health of the insurer or reinsurer implementing them.

Apart from the recovery plans, the IRRD proposal provides for the drafting of resolution plans. As in the case of the banking sector, those plans – which will be devised by a resolution authority to be designated – must include the resolution measures which that authority proposes to adopt if the resolution conditions are met. Those conditions are the same as the ones in force for the banking sector. First of all, it is necessary to ascertain that the insurer or reinsurer is failing or likely to fail. Next, there must be no alternative supervisory action or private sector measures which could solve the situation within a reasonable timeframe. Third, the resolution action must be necessary in the public interest. If the third condition is also

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

2 Regulation (EU) 2021/23 of the European Parliament and of the Council of 16 December 2020 on a framework for the recovery and resolution of central counterparties and amending Regulations (EU) No. 1095/2010, (EU) No. 648/2012, (EU) No. 600/2014, (EU) No. 806/2014 and (EU) 2015/2365 and Directives 2002/47/EC, 2004/25/EC, 2007/36/EC, 2014/59/EU and (EU) 2017/1132.

met, the resolution authority must apply one of the resolution tools.

The resolution tools planned for insurers or reinsurers are similar to, but not the same as, those applicable to the banking sector. The actual tools are as follows: a) the write-down or conversion tool, b) the solvent run-off tool, c) the sale of business tool, d) the bridge undertaking tool, and e) the asset and liability separation tool.

The IRRD proposal does not introduce any obligation for Member States to define an MREL, nor any obligation to establish a resolution fund or insurance guarantee scheme. However, Member States could voluntarily decide to create such a fund or guarantee scheme.

2. Resolvability of credit institutions and investment firms

The resolution plans follow an annual cycle. Year after year, specific elements are examined in more detail. As the resolution plans must be implemented rapidly in the event of an institution's failure, the work during the 2021 resolution cycle was devoted mainly to rendering the resolution strategies operational. The main tool for that purpose is the preparation of playbooks, both for the preferred resolution strategy and for the variant resolution strategy. For Belgian institutions, this concerns playbooks for the bail-in tool and for the sale of business tool. The SRB expects the institutions to test part of these playbooks during the 2022 resolution planning cycle. In that connection, the emphasis will be on both the operational aspects and the data points necessary for determining the conversion rate.

2.1 Institutions under the remit of the SRB

Apart from the operationalisation of the resolution plans, certain specific aspects of resolvability are examined in depth in each resolution planning cycle. The SRB document "expectations for banks" [1] is used as the guidance for establishing the annual priorities. For the 2021 resolution planning cycle, the emphasis was on three priorities, namely: a) liquidity and funding during resolution, including examination of the potential causes of liquidity needs, b) management information systems and capabilities for valuation data, and c) operationalisation of the bail-in tool with the aid of a playbook and a management information system for the bail-in data points. For the 2022 resolution planning cycle, particular attention will be paid to the following aspects: a) identification of the assets that could be used as security or collateral for obtaining additional liquidity; in that connection, institutions are asked to conduct an analysis of the assets not used as collateral in normal circumstances, b) plans for reorganising the business after application of the bail-in tool, and c) the possibilities for separating a resolution group or entity.

Since the SRMR2 came into force at the end of 2020, the Bank has been able to ask the SRB to apply the MREL regime for top-tier banks to certain resolution entities which are not top-tier banks (fishing option). During the 2021 resolution plan cycle, the Bank identified all the institutions eligible for implementation of that option. First, the option can only be applied to resolution entities. Institutions or entities not designated as resolution entities, such as certain subsidiaries, are therefore ineligible. Second, the resolution entity concerned must also form part of a resolution group with a balance sheet total of less than € 100 billion. Finally, the Bank must consider that the failure of the entity concerned could reasonably pose a systemic risk. After identifying the resolution entities which meet the application conditions, the Bank conducted a proportionality analysis in order to ensure equality of treatment for less significant institutions and institutions deemed significant but having a balance sheet total of less than € 100 billion. The SRB only needs to consider the Bank's request when taking an MREL decision during the current resolution planning cycle. The option is therefore exercised and reassessed annually, in parallel with the resolution planning cycle.

Resolutions plans are drawn up not only for institutions for which resolution would be effected by applying the resolution tools and powers, but also for institutions which could be wound up via a normal insolvency proceedings. That procedure is followed if the resolution authority decides that it is not in the public interest to put the institution into resolution. The Bank favours a broader interpretation of the "public interest" which would permit the use of resolution tools and powers to deal with the failure of a

1 The SRB's expectations regarding resolvability were published in the form of a document containing guidelines for the banking sector on the measures that institutions must adopt in order to be able to demonstrate their resolvability by the end of 2023. See the SRB's website https://www.srb.europa.eu/system/files/media/document/efb_main_doc_final_web_0_0.pdf.

greater number of institutions. Moreover, the choice of resolution strategy also affects the MREL. The regulatory framework stipulates that if the resolution plan provides for an institution's liquidation via a normal insolvency proceedings, the resolution authority must assess whether it is justified to limit the MREL to the loss-absorbing amount or whether that amount should be adjusted. As mentioned below, the Bank is in favour of an appropriate calibration of the MREL, whereby the loss-absorbing amount would be increased for institutions which could be wound up via a normal insolvency proceedings but whose failure could, in certain cicumstances, affect the stability of the Belgian financial system.

14 MREL decisions were adopted in 2021 for institutions subject to the direct authority of the Bank

Since the introduction of the BRRD 2, a distinction has applied between a) decisions on external MREL for resolution entities, and b) decisions on internal MREL for subsidiaries which belong to a resolution group but are not themselves resolution entities. The regulation stipulates that these requirements must be met with effect from 2024. Although the scope is clearly defined in the legislation, decisions on internal MREL are not yet applied to all subsidiaries which come into consideration. That is due to the progressive approach whereby the SRB takes account of the subsidiary's importance within the resolution group. Since the legislation makes no provision for waivers from internal MREL for subsidiaries which are not based in the same country as their parent company, the Bank considers that an MREL should be imposed on those subsidiaries as soon as possible, e.g. during the next resolution planning cycle.

2.2 Institutions under the Bank's direct remit

In the case of institutions falling under the Bank's direct authority, 14 MREL decisions were adopted in 2021. For 13 of those institutions, the decision concerned the 2020 cycle, as it had not been possible to finalise it before transposition of the BRRD 2 into Belgian law (see above). In regard to the 2021 resolution planning cycle, the resolution plan and the MREL decision were finalised for one institution.

In Belgium, less significant institutions are divided into three categories, each subject to a different MREL calibration. The first category comprises institutions whose failure would not harm the stability of the financial system in Belgium and which could therefore be wound up by normal insolvency proceedings. This category of institution is subject to an MREL equivalent to their loss-absorbing amount. In other words, the MREL of these institutions is equal to their capital requirements.

The second category comprises institutions whose resolution plan specifies that, in all probability, they could be wound up by normal insolvency proceedings but their failure could in certain circumstances, e.g. in the context of a systemic crisis, affect the stability of the Belgian financial system, particularly in view of their links with Belgium's real economy and the amounts of their covered deposits. For this category of institutions, the amount necessary to absorb the losses was adjusted upwards so that their MREL exceeds their capital requirement. However, this upward revision is calibrated in accordance with the limits imposed by the regulations and by the SRB; their MREL is therefore still below that of institutions in the third category.

This third category comprises institutions for which the resolution plan considers that the public interest criterion would be met in the event of failure. Such a situation would therefore necessitate the use of the resolution tools and powers. In that context, the MREL includes not only a loss-absorbing amount but also an amount for ensuring recapitalisation and market confidence after completion of the resolution procedure.

3. Set-up of resolution financing arrangements

The BRRD stipulates that a resolution fund financed by collecting contributions from credit institutions and investment firms must be established in each Member State. Each resolution fund must represent a target level of at least 1 % of the total covered deposits by no later than 31 December 2024.

Under the SRMR, the SRF was established within the Banking Union on 1 January 2016. The SRF replaces the national resolution funds in the case of credit institutions, and investment firms and financial institutions subject to the ECB's consolidated supervision.

The resolution fund is used to support the measures taken by the resolution authorities when a banking group is failing. It can guarantee the assets or liabilities of a failing institution, grant it loans, acquire some of its assets or – under certain conditions – make contributions to it. The resolution fund can also intervene in relation to a bridge institution, an asset management vehicle or even a purchaser if the business is sold. Conversely, the resolution fund cannot directly absorb the losses of an institution in resolution.

In 2021, the institutions subject to the SRF jointly contributed the sum of € 10.4 billion. Of that total, € 357 million came from Belgian institutions required to contribute, as opposed to € 301 million in 2020. That increase is mainly due to the steep rise in the amount of covered deposits, which determine the SRF target amount. This increased the size of the fund to € 52 billion. The SRB considers that the SRF target, which is 1 % of the total covered deposits of institutions approved in the Banking Union, could approach € 70 billion by the end of the transitional period for creation of the fund, which will expire in 2023. However, a further rise in covered deposits in the coming years could drive that target to a higher level.

Apart from its own resources, the SRF will have a renewable credit line from the European Stability Mechanism with effect from the beginning of 2022. This is a supplementary emergency fund which can be used and which can, if appropriate, double the size of the SRF. This credit line is initially supplied by public funds in order to restore market confidence immediately. However, this credit line funded by Banking Union Member States has to be repaid by all the institutions required to contribute to the Banking Union in the years following its use.

During the year under review the General Court [1], followed on appeal by the Court of Justice of the European Union [2], ruled on the actions for annulment brought by a number of institutions from other Member States against the SRB's decisions on the *ex-ante* contributions for 2016 and 2017. One of the points mentioned by the court in its judgment was that the SRB had not correctly fulfilled the obligation to state its reasons when taking the decisions in question, even though the infringement stemmed from the partly illegal nature of Commission Delegated Regulation (EU) 2015/63 [3]. Under that Regulation, the SRB is required to include data on other institutions in the basis of calculation [4]. However, since those data are confidential, the individual decisions cannot include an adequate explanation of how the specific institution's contribution is calculated, and the institution concerned cannot verify whether the calculation is correct. Nevertheless, on appeal the Court of Justice of the European Union annulled the decision of the General Court, considering that the statement of reasons need not necessarily include all the data enabling an institution to verify whether the amount of the contribution was correctly calculated. That point of view would inevitably imply the establishment of a calculation method not requiring the use of confidential data on the sector as a whole, which would impose excessive constraints on the legislature's discretionary power in the choice of a calculation method. The EU Court of Justice takes the view that it is sufficient if institutions have enough information to understand, in essence, how their individual situation is taken into account, having regard to the aggregate situation of all the other institutions concerned. Delegated Regulation (EU) 2015/63 therefore does not hinder fulfilment of the obligation to state reasons, and the Court confirmed its legality.

Institutions which are not subject to the SRF, namely Belgium-based branches of third-country credit institutions or investment firms, and Belgian stockbroking firms not subject to the ECB's consolidated supervision of their parent company, are required to pay a contribution to the national resolution fund. After payment of the national resolution fund contributions in 2021, the fund's reserves amounted to just over € 2.1 million. In 2023, the national resolution fund's reserves should reach € 2.6 million, the current target figure.

1 General Court, Landesbank Baden-Württemberg v. Single Resolution Board, case T-411/17.

2 Court of Justice of the European Union, European Commission v. Landesbank Baden-Württemberg, C-584/20, and Single Resolution Board v. Landesbank Baden-Württemberg, C-621/20 (joined cases).

3 Commission Delegated Regulation (EU) 2015/63 of 21 October 2014 supplementing Directive 2014/59/EU of the European Parliament and of the Council with regard to ex ante contributions to resolution financing arrangements.

4 The total target for the SRF was set at 1 % of the amount of the covered deposits of all the institutions together, each institution's annual basic contribution being calculated according to the ratio between its liabilities (excluding own funds) after deduction of the covered deposits, and the total liabilities (excluding own funds) after deduction of the covered deposits of all institutions approved in the territory of the Member States as a whole.

Annexes

Annex 1

Main macroeconomic indicators in the euro area and other major economies (1-2)

(percentage changes compared to the previous year, unless otherwise stated)

	GDP[1]			Unemployment rate[2]			Inflation[3]		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Euro area	1.5	–6.5	5.1	7.6	7.9	7.7	1.2	0.3	2.6
Germany	1.1	–4.9	2.5	3.2	3.9	3.6	1.4	0.4	3.2
France	1.8	–8.0	6.7	8.4	8.0	8.0	1.3	0.5	2.1
Italy	0.4	–9.0	6.2	10.0	9.3	9.5	0.6	–0.1	1.9
Spain	2.1	–10.8	4.5	14.1	15.5	15.0	0.8	–0.3	3.0
Netherlands	1.9	–3.8	4.5	3.4	3.8	3.3	2.7	1.1	2.8
Belgium[4]	2.1	–5.7	6.1	5.4	5.6	6.3	1.2	0.4	3.2
Austria	1.5	–6.8	4.9	4.8	6.1	6.3	1.5	1.4	2.8
Greece	1.8	–9.0	7.2	17.3	16.3	15.7	0.5	–1.3	0.6
Finland	1.3	–2.9	3.5	6.7	7.8	7.7	1.1	0.4	2.1
Portugal	2.7	–8.4	4.8	6.6	7.0	6.6	0.3	–0.1	0.9
Ireland	4.9	5.9	15.8	5.0	5.9	6.7	0.9	–0.5	2.4
Slovakia	2.6	–4.4	3.1	5.8	6.7	6.9	2.8	2.0	2.8
Luxembourg	3.3	–1.8	6.0	5.4	6.3	5.8	1.6	0.0	3.5
Slovenia	3.3	–4.2	6.7	4.5	5.0	4.8	1.7	–0.3	2.0
Cyprus	5.3	–5.2	5.6	7.1	7.6	7.5	0.5	–1.1	2.3
Estonia	4.0	–2.6	8.0	4.4	6.8	6.2	2.3	–0.6	4.5
Malta	5.7	–8.3	6.0	3.6	4.3	3.4	1.5	0.8	0.7
Latvia	2.4	–3.6	4.6	6.3	8.1	7.8	2.7	0.1	3.1
Lithuania	4.6	0.0	5.1	6.3	8.6	7.1	2.2	1.1	3.8
United Kingdom	1.5	–9.4	7.2	3.8	4.5	4.5	1.8	0.9	2.6
United States	2.3	–3.4	5.6	3.7	8.1	5.4	1.8	1.2	4.7
Japan	0.0	–4.5	1.6	2.3	2.8	2.8	0.5	0.0	–0.3
China	6.0	2.3	8.1	3.6	4.2	3.8	2.9	2.5	0.9

Sources: BLS (US), CEIC, EC, ECB, Eurostat, IMF, OECD, ONS (UK), Refinitiv (an LSEG company), NBB.

1 Calendar adjusted volume data. ECB projections (December) for the euro area and its countries and IMF projections (January) for the other countries.

2 Ratio between the number of unemployed and the working population, in %. ECB projections (December) for the euro area and its countries, OECD projections (December) for the other advanced countries and IMF projections (October) for China.

3 Eurostat for euro area countries, ONS for the United Kingdom, BLS for the United States, CEIC for China and Refinitiv for Japan.

4 NAI, NBB.

Annex 2

Main macroeconomic indicators in the euro area and other major economies (2-2)

(in % of GDP)

	Balance of payments current account[1]			Overall balance of general government[2]			Public debt[2]		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Euro area	2.4	1.8	2.0	−0.6	−7.2	−5.9	83.6	97.3	96.6
Germany	7.6	7.1	6.7	1.5	−4.3	−6.5	58.9	68.7	71.4
France	−0.8	−2.6	−2.4	−3.1	−9.1	−8.1	97.5	115.0	114.6
Italy	3.2	3.8	3.5	−1.5	−9.6	−9.4	134.3	155.6	154.4
Spain	2.1	0.8	0.3	−2.9	−11.0	−8.1	95.5	120.0	120.6
Netherlands	9.4	7.0	8.4	1.7	−4.2	−5.3	48.5	54.3	57.5
Belgium	0.2	0.8	2.0	−1.9	−9.1	−6.2	97.7	112.8	108.6
Austria	2.2	1.9	−0.1	0.6	−8.3	−5.9	70.6	83.2	82.9
Greece	−4.1	−7.9	−6.3	1.1	−10.1	−9.9	180.7	206.3	202.9
Finland	−0.3	0.8	1.2	−0.9	−5.5	−3.8	59.5	69.5	71.2
Portugal	0.1	−1.2	−0.9	0.1	−5.8	−4.5	116.6	135.2	128.1
Ireland	−11.3	−2.8	15.4	0.5	−4.9	−3.2	57.2	58.4	55.6
Slovakia	−2.0	−0.8	−1.7	−1.3	−5.5	−7.3	48.1	59.7	61.8
Luxembourg	−2.4	3.7	5.5	2.3	−3.5	−0.2	22.3	24.8	25.9
Slovenia	6.1	7.6	5.4	0.4	−7.7	−7.2	65.6	79.8	77.7
Cyprus	−5.7	−10.1	−9.1	1.3	−5.7	−4.9	91.1	115.3	104.1
Estonia	2.0	−0.8	−1.1	0.1	−5.6	−3.1	8.6	19.0	18.4
Malta	7.7	1.6	0.4	0.5	−9.7	−11.1	40.7	53.4	61.4
Latvia	−0.7	2.9	1.1	−0.6	−4.5	−9.5	36.7	43.2	48.2
Lithuania	3.5	7.3	2.6	0.5	−7.2	−4.1	35.9	46.6	45.3
United Kingdom	−2.7	−2.6	−2.8	−2.3	−12.9	−9.1	118.5	154.4	155.6
United States	−2.2	−2.9	−3.6	−6.4	−15.4	−12.5	108.5	133.9	131.2
Japan	3.4	2.9	3.2	−2.9	−9.5	−6.4	223.0	237.3	242.0
China	0.7	1.9	1.7	−6.3	−11.2	−7.5	57.1	66.3	68.9

Sources: EC, ECB, IMF, OECD, NBB.

1 ECB (December) for the euro area total, EC (autumn) for the euro area countries, NAI-NBB for Belgium, OECD (December) for the other countries.

2 ECB (December) for the euro area total, EC (autumn) for the euro area countries, NAI-NBB for Belgium, OECD (December) for the other advanced countries, IMF (October) for China.

Annex 3

GDP and main categories of expenditure, by volume

(calendar adjusted data ; percentage changes compared to the previous year, unless otherwise stated)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 e
Household final consumption expenditure	1.5	1.7	0.6	1.6	1.6	1.9	1.9	1.8	–8.2	6.3
General government final consumption expenditure	1.2	0.1	1.2	0.3	0.5	0.2	1.3	1.7	0.2	4.5
Gross fixed capital formation	0.6	–2.3	5.4	3.7	4.2	1.4	3.0	4.5	–6.2	9.6
Housing	0.2	–3.2	5.9	–0.1	2.6	1.0	1.5	5.1	–6.8	10.4
Enterprises	0.1	–1.5	4.0	5.5	5.4	1.6	2.4	4.8	–7.0	9.2
General government	5.1	–5.0	13.2	1.0	–0.6	1.1	10.2	1.7	0.6	10.9
p.m. Final domestic expenditure [1,2]	*1.2*	*0.4*	*1.8*	*1.7*	*1.9*	*1.3*	*2.0*	*2.4*	*–5.7*	*6.5*
Change in inventories and acquisitions less disposals of valuables [1]	–0.6	–0.4	0.0	0.4	0.3	0.0	0.4	–0.5	–0.3	–0.9
Net exports of goods and services [1]	0.2	0.5	–0.2	–0.1	–0.9	0.3	–0.6	0.3	0.4	0.5
Exports of goods and services	–0.5	0.4	5.2	3.7	6.2	5.5	0.6	2.0	–5.5	9.0
Imports of goods and services	–0.7	–0.2	5.5	3.9	7.5	5.2	1.4	1.6	–5.9	8.5
GDP	0.7	0.5	1.6	2.0	1.3	1.6	1.8	2.1	–5.7	6.1
Trade surplus (+) or deficit (–) due to the change in the terms of trade [3]	0.0	0.2	0.3	0.8	0.7	–0.4	–0.7	0.6	0.4	–0.4
Net primary incomes received from the rest of the world [3]	2.2	0.2	–0.3	–0.6	–0.4	0.0	0.0	0.1	0.0	0.1
GNI	2.9	0.9	1.5	2.1	1.5	1.2	1.1	2.9	–5.3	5.9
p.m. Total domestic expenditure [4]	*0.6*	*0.0*	*1.8*	*2.2*	*2.2*	*1.4*	*2.5*	*1.9*	*–6.1*	*5.7*
Final expenditure [5]	*0.1*	*0.2*	*3.3*	*2.9*	*3.9*	*3.2*	*1.6*	*1.9*	*–5.8*	*7.1*
General government expenditure [6]	*1.5*	*–0.3*	*2.3*	*0.3*	*0.4*	*0.3*	*2.2*	*1.7*	*0.2*	*5.1*

Sources : NAI, NBB.
1 Contribution to the change in GDP.
2 Household and general government final consumption expenditure and gross fixed capital formation and acquisitions less disposals of valuables.
3 Contribution to the change in GNI.
4 Final domestic expenditure and change in inventories.
5 Total domestic expenditure and exports of goods and services.
6 Final consumption expenditure and gross fixed capital formation of general government.

Annex 4

GDP and the main categories of expenditure, at current prices

(data not adjusted for calendar effects, in € million)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 e
Household final consumption expenditure	200 594	206 110	208 801	213 930	220 597	229 077	238 209	245 798	226 961	246 230
General government final consumption expenditure	93 853	95 520	97 663	98 404	100 047	102 506	106 227	109 857	113 117	120 356
Gross fixed capital formation	88 673	87 113	91 908	95 689	100 114	103 601	108 530	115 493	109 321	123 830
Housing	19 550	19 144	20 322	20 248	20 897	21 652	22 670	24 713	23 652	27 003
Enterprises	59 530	58 833	61 258	65 053	68 852	71 219	73 789	78 302	73 131	82 393
General government	9 593	9 136	10 328	10 388	10 366	10 731	12 071	12 478	12 538	14 434
p.m. Final domestic expenditure [1]	383 120	388 743	398 372	408 023	420 758	435 184	452 966	471 149	449 399	490 415
Change in inventories and acquisitions less disposals of valuables	2 812	1 003	1 331	2 769	4 191	5 242	8 174	3 879	1 070	7 353
Net exports of goods and services	243	3 135	3 300	5 909	5 136	4 624	−1 111	3 133	6 425	7 777
Exports of goods and services	310 502	311 650	321 601	324 216	341 615	370 203	381 989	392 989	365 577	429 326
Imports of goods and services	310 259	308 515	318 301	318 307	336 479	365 579	383 100	389 855	359 153	421 549
GDP	386 175	392 880	403 003	416 701	430 085	445 050	460 029	478 161	456 893	505 545
Net primary incomes received from the rest of the world	8 961	9 679	8 456	5 897	4 125	4 080	4 072	4 594	4 836	5 406
GNI	395 136	402 559	411 459	422 599	434 211	449 130	464 101	482 755	461 729	510 952
p.m. Total domestic expenditure [2]	*385 932*	*389 745*	*399 704*	*410 793*	*424 949*	*440 426*	*461 140*	*475 027*	*450 468*	*497 768*
Final expenditure [3]	*696 433*	*701 395*	*721 304*	*735 008*	*766 564*	*810 630*	*843 130*	*868 016*	*816 046*	*927 094*
General government expenditure [4]	*103 446*	*104 656*	*107 992*	*108 792*	*110 413*	*113 237*	*118 298*	*122 336*	*125 655*	*134 790*

Sources: NAI, NBB.

1 Household and general government final consumption expenditure and gross fixed capital formation and acquisitions less disposals of valuables.

2 Final domestic expenditure and change in inventories.

3 Total domestic expenditure and exports of goods and services.

4 Final consumption expenditure and gross fixed capital formation of general government.

Annex 5

Labour market

(annual averages, thousands of persons)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 e
Population of working age [1]	7 247	7 259	7 268	7 284	7 300	7 312	7 325	7 343	7 358	7 365
Labour force	5 212	5 223	5 255	5 277	5 309	5 356	5 396	5 455	5 471	5 529
National employment	**4 653**	**4 639**	**4 658**	**4 698**	**4 756**	**4 830**	**4 901**	**4 979**	**4 977**	**5 065**
Frontier workers (balance)	81	80	80	81	81	82	83	84	83	83
Domestic employment	4 572	4 559	4 577	4 617	4 675	4 748	4 818	4 895	4 894	4 982
Self-employed	743	750	756	766	778	791	804	819	833	852
Employees	3 829	3 809	3 821	3 851	3 897	3 957	4 014	4 077	4 061	4 130
Branches sensitive to the business cycle [2]	2 394	2 368	2 367	2 386	2 414	2 450	2 488	2 525	2 496	2 541
Public administration and education	805	809	814	814	816	824	831	842	848	861
Other services [3]	630	632	639	651	667	683	695	709	717	728
Unemployment [4]	**559**	**584**	**598**	**579**	**553**	**525**	**495**	**476**	**494**	**464**

Sources: FPB, NAI, NEO, Statbel, NBB.

1 Persons aged 15 to 64.

2 The branches agriculture; industry; construction; production and supply of electricity, gas, steam and air conditioning; water supply; sewerage, waste management and remediation activities; trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities; information and communication; financial and insurance activities; real estate activities; specialist, scientific and technical activities and administrative and support service activities.

3 The branches human health and social work, culture, entertainment and recreational activities; other service activities and activities of households as employers.

4 Unemployed job-seekers.

Annex 6

Employment rate

(in % of the corresponding population aged 20 to 64[1], annual averages)

	2012	2013	2014	2015	2016	2017[2]	2018	2019	2020	2021[3]
Total	67.2	67.2	67.3	67.2	67.7	68.5	69.7	70.5	70.0	70.3
p.m. Total (from 15 to 64 years)	*61.8*	*61.8*	*61.9*	*61.8*	*62.3*	*63.1*	*64.5*	*65.3*	*64.7*	*65.0*
According to gender										
Women	61.7	62.1	62.9	63.0	63.0	63.6	65.5	66.5	65.9	66.2
Men	72.7	72.3	71.6	71.3	72.3	73.4	73.9	74.5	74.1	74.3
According to age										
20 to 29	59.4	57.9	57.8	57.6	57.6	57.5	58.9	60.9	58.1	58.9
30 to 54	79.9	79.8	79.7	79.3	79.9	80.4	81.3	81.4	81.2	81.0
55 to 64	39.5	41.7	42.7	44.0	45.4	48.3	50.3	52.1	53.3	54.1
According to Region										
Brussels	58.2	56.8	58.7	58.7	59.8	60.8	61.4	61.7	61.3	61.5
Flanders	71.5	71.9	71.9	71.9	72.0	73.0	74.6	75.5	74.7	75.1
Wallonia	62.5	62.3	61.8	61.5	62.6	63.2	63.7	64.6	64.6	64.7
According to educational level										
Lower secondary education or less	47.1	46.8	46.6	45.6	45.6	45.9	45.6	46.3	45.6	44.2
Upper secondary education	68.5	68.6	67.2	67.2	67.7	67.8	69.0	69.8	68.1	67.3
Higher education	81.8	81.0	82.0	81.8	82.2	82.2	83.5	83.8	83.6	83.8
According to nationality[4]										
Belgian	68.6	68.7	68.6	68.5	69.0	69.8	71.0	71.8	71.5	71.5
Other EU nationals	65.2	63.6	65.7	66.4	67.8	68.2	69.2	70.1	70.2	72.5
Other	38.9	39.9	40.5	42.7	41.8	41.6	43.4	43.2	40.3	43.1

Source: Statbel.

1 These employment rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 As a result of the reform of the labour force survey, in which a rotary panel was introduced in particular, the results from 2017 are not fully comparable with those of the previous years. For more information, see https://statbel.fgov.be/en.

3 Averages of the first three quarters. Changes to the definitions of employment and unemployment with the consequence that the figures up to and including 2020 are not fully comparable with those of 2021. For more information, see statbel.fgov.be/en/changes-labour-force-survey-lfs-2021.

4 From 2020, new EU configuration without UK.

Annex 7

Unemployment rate

(in % of the corresponding labour force aged 15 to 64[1], annual averages)

	2012	2013	2014	2015	2016	2017[2]	2018	2019	2020	2021[3]
Total	7.6	8.5	8.6	8.6	7.9	7.1	6.0	5.4	5.6	6.5
According to gender										
Women	7.4	8.2	8.0	7.8	7.6	7.1	5.6	5.0	5.4	6.3
Men	7.7	8.7	9.1	9.2	8.1	7.2	6.3	5.8	5.8	6.6
According to age										
15 to 24	19.8	23.7	23.2	22.1	20.1	19.3	15.8	14.2	15.3	19.2
25 to 54	6.7	7.4	7.6	7.7	7.1	6.2	5.4	4.8	5.0	5.5
55 to 64	4.5	5.4	5.4	5.6	5.7	5.9	4.3	4.1	4.2	5.0
According to Region										
Brussels	17.5	19.3	18.5	17.5	16.9	15.0	13.4	12.7	12.4	12.9
Flanders	4.6	5.1	5.1	5.2	4.9	4.4	3.5	3.3	3.5	4.1
Wallonia	10.1	11.4	12.0	12.0	10.6	9.8	8.5	7.2	7.4	9.0
According to educational level										
Lower secondary education or less	14.2	16.0	16.4	17.0	16.2	14.8	13.3	12.2	12.3	15.2
Upper secondary education	7.8	8.3	8.8	8.7	8.0	7.2	6.0	5.3	5.8	7.2
Higher education	4.0	4.9	4.7	4.6	4.2	4.3	3.5	3.2	3.5	3.7
According to nationality[4]										
Belgian	6.5	7.4	7.5	7.6	7.0	6.2	5.2	4.8	5.0	5.8
Other EU nationals	11.1	12.5	11.4	11.0	9.9	9.9	8.3	7.2	7.2	7.4
Other	30.7	29.9	31.0	26.6	27.2	25.0	23.2	19.5	19.7	21.3

Source: Statbel.

1 These unemployment rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 As a result of the reform of the labour force survey, in which a rotary panel was introduced in particular, the results from 2017 are not fully comparable with those of the previous years. For more information, see https://statbel.fgov.be/en.

3 Averages of the first three quarters. Changes to the definitions of employment and unemployment with the consequence that the figures up to and including 2020 are not fully comparable with those of 2021. For more information, see statbel.fgov.be/en/changes-labour-force-survey-lfs-2021.

4 From 2020, new EU configuration without UK.

Annex 8

Inactivity rate

(in % of the corresponding population aged 15 to 64[1], annual averages)

	2012	2013	2014	2015	2016	2017[2]	2018	2019	2020	2021[3]
Total	33.1	32.5	32.3	32.4	32.4	32.0	31.4	31.0	31.4	30.5
According to gender										
Women	38.7	37.7	37.0	37.0	37.1	36.8	35.7	35.1	35.5	34.6
Men	27.5	27.3	27.6	27.8	27.7	27.2	27.2	26.9	27.4	26.5
According to age										
15 to 24	68.5	69.0	69.8	70.0	71.5	71.9	70.4	69.0	71.6	69.8
25 to 54	15.0	14.7	14.4	14.9	14.9	15.2	15.0	15.2	15.5	14.9
55 to 64	58.6	55.9	54.9	53.4	51.9	48.7	47.4	45.7	44.4	43.0
According to Region										
Brussels	34.6	34.9	33.4	34.3	33.5	33.9	34.5	34.8	35.4	34.9
Flanders	31.0	30.2	30.1	30.0	30.1	29.4	28.2	27.3	28.1	27.2
Wallonia	36.3	35.6	35.8	36.1	36.1	36.1	36.2	36.2	36.1	34.9
According to educational level										
Lower secondary education or less	55.6	55.3	55.4	56.6	57.0	58.3	59.0	59.0	60.4	60.4
Upper secondary education	29.3	28.9	30.0	29.9	30.0	29.9	29.1	28.5	30.1	30.6
Higher education	14.9	14.8	14.0	14.2	14.2	14.1	13.6	13.4	13.5	13.1
According to nationality[4]										
Belgian	32.6	32.0	31.9	32.0	32.0	31.7	31.0	30.4	30.8	30.1
Other EU nationals	30.1	30.7	29.4	29.1	28.6	27.8	28.3	28.2	28.2	25.6
Other	47.8	46.4	45.0	45.6	45.9	47.3	46.1	49.0	51.9	47.7

Source: Statbel.

1 These inactivity rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 As a result of the reform of the labour force survey, in which a rotary panel was introduced in particular, the results from 2017 are not fully comparable with those of the previous years. For more information, see https://statbel.fgov.be/en.

3 Averages of the first three quarters. Changes to the definitions of employment and unemployment with the consequence that the figures up to and including 2020 are not fully comparable with those of 2021. For more information, see statbel.fgov.be/en/changes-labour-force-survey-lfs-2021.

4 From 2020, new EU configuration without UK.

Annex 9

Employment rate: regional details

(in % of the corresponding population aged 20 to 64 [1], annual averages)

	Brussels				Flanders				Wallonia			
	2018	2019	2020	2021 [2]	2018	2019	2020	2021 [2]	2018	2019	2020	2021 [2]
Total	61.4	61.7	61.3	61.5	74.6	75.5	74.7	75.1	63.7	64.6	64.6	64.7
p.m. Total (from 15 to 64 years)	*56.8*	*56.9*	*56.5*	*56.7*	*69.4*	*70.3*	*69.4*	*69.8*	*58.4*	*59.2*	*59.2*	*59.2*
According to gender												
Women	56.6	56.0	55.3	55.5	70.7	71.5	70.9	71.5	59.3	61.1	60.7	60.6
Men	66.3	67.4	67.3	67.6	78.5	79.3	78.5	78.6	68.2	68.2	68.5	68.9
According to age												
20 to 29	47.3	48.2	45.1	46.1	66.4	69.2	65.6	66.2	50.5	51.6	50.4	51.5
30 to 54	70.3	70.4	70.1	70.2	86.7	86.4	86.2	86.2	75.6	76.5	76.4	75.8
55 to 64	49.5	49.6	52.9	52.7	52.5	54.9	55.7	56.6	46.4	47.4	48.8	49.9
According to educational level												
Lower secondary education or less	40.9	39.9	39.2	37.3	52.1	54.2	52.9	50.6	38.5	38.5	38.1	38.4
Upper secondary education	53.3	56.5	54.0	51.8	73.6	74.2	72.7	72.4	63.9	64.8	62.7	61.8
Higher education	78.5	78.5	77.8	78.8	85.9	86.1	85.6	86.1	80.8	81.7	82.0	81.3
According to nationality [3]												
Belgian	60.9	61.1	61.8	59.9	75.5	76.3	75.7	76.0	65.0	66.2	66.2	66.0
Other EU nationals	72.9	72.9	72.9	75.7	73.0	75.7	74.4	76.0	60.3	60.7	61.8	62.7
Other	40.2	41.9	37.6	40.9	50.4	50.5	48.8	47.1	36.2	32.1	28.6	39.1

Source: Statbel.

1 These employment rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 Averages of the first three quarters. Changes to the definitions of employment and unemployment with the consequence that the figures up to and including 2020 are not fully comparable with those of 2021. For more information, see statbel.fgov.be/en/changes-labour-force-survey-lfs-2021.

3 From 2020, new EU configuration without UK.

Annex 10

Unemployment rate: regional details

(in % of the corresponding labour force aged 15 to 64[1], annual averages)

	Brussels				Flanders				Wallonia			
	2018	2019	2020	2021[2]	2018	2019	2020	2021[2]	2018	2019	2020	2021[2]
Total	13.4	12.7	12.4	12.9	3.5	3.3	3.5	4.1	8.5	7.2	7.4	9.0
According to gender												
Women	11.9	12.6	12.8	12.7	3.3	3.1	3.6	3.8	8.0	6.0	6.5	9.2
Men	14.5	12.8	12.1	13.1	3.5	3.3	3.5	4.3	9.0	8.2	8.2	8.8
According to age												
15 to 24	30.6	29.2	29.1	33.8	10.9	9.5	10.8	14.3	22.5	21.9	21.7	26.3
25 to 54	12.5	11.6	11.4	12.0	2.8	2.6	2.9	3.0	7.9	6.4	6.6	8.1
55 to 64	10.6	12.8	12.0	10.8	3.0	2.8	2.8	4.0	5.4	4.5	4.7	5.4
According to educational level												
Lower secondary education or less	25.8	24.8	25.6	29.7	6.9	6.5	6.3	9.2	18.3	16.2	16.4	18.6
Upper secondary education	16.6	13.5	14.3	16.0	3.3	3.4	3.6	4.6	9.1	7.6	8.3	10.4
Higher education	7.0	7.6	6.9	6.4	2.5	2.1	2.6	2.5	4.1	3.4	3.7	5.0
According to nationality[3]												
Belgian	12.7	12.8	12.2	13.3	3.0	2.9	3.1	3.6	7.9	6.8	7.1	8.7
Other EU nationals	9.4	8.4	8.7	7.5	6.0	5.5	5.9	6.4	10.2	8.1	7.2	8.8
Other	29.5	24.6	25.0	26.3	16.1	13.5	13.8	18.2	27.7	25.2	25.6	20.1

Source: Statbel.

1 These unemployment rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 Averages of the first three quarters. Changes to the definitions of employment and unemployment with the consequence that the figures up to and including 2020 are not fully comparable with those of 2021. For more information, see statbel.fgov.be/en/changes-labour-force-survey-lfs-2021.

3 From 2020, new EU configuration without UK.

Annex 11

Inactivity rate: regional details

(in % of the corresponding population aged 15 to 64[1], annual averages)

	Brussels				Flanders				Wallonia			
	2018	2019	2020	2021[2]	2018	2019	2020	2021[2]	2018	2019	2020	2021[2]
Total	34.5	34.8	35.4	34.9	28.2	27.3	28.1	27.2	36.2	36.2	36.1	34.9
According to gender												
Women	40.5	40.7	41.4	41.3	31.8	31.1	31.5	30.8	40.8	40.3	40.5	39.0
Men	28.4	28.9	29.5	28.5	24.5	23.6	24.7	23.7	31.5	32.1	31.7	30.9
According to age												
15 to 24	77.6	79.0	80.7	81.5	66.1	63.1	67.3	65.1	75.1	75.6	75.6	73.6
25 to 54	21.2	21.6	22.7	21.4	11.4	11.6	11.7	11.4	19.3	19.3	19.5	18.6
55 to 64	44.6	43.1	39.9	40.9	45.9	43.5	42.7	41.1	50.9	50.4	48.8	47.3
According to educational level												
Lower secondary education or less	56.1	57.9	58.4	58.5	56.8	55.2	57.5	58.2	63.2	64.5	65.3	64.3
Upper secondary education	38.4	36.9	39.3	41.4	26.4	25.7	26.9	27.0	31.9	32.0	34.0	34.6
Higher education	15.6	15.1	16.5	15.9	12.0	12.1	12.2	11.7	15.9	15.4	14.9	14.4
According to nationality[3]												
Belgian	36.6	36.3	36.2	37.3	27.8	26.9	27.6	26.9	35.6	35.3	35.1	34.3
Other EU nationals	23.2	24.7	24.7	22.8	26.9	23.8	25.0	22.7	36.0	37.1	36.4	34.0
Other	45.9	47.2	51.5	47.4	42.4	44.6	45.8	45.0	52.3	59.5	63.6	52.3

Source: Statbel.

1 These inactivity rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 Averages of the first three quarters. Changes to the definitions of employment and unemployment with the consequence that the figures up to and including 2020 are not fully comparable with those of 2021. For more information, see statbel.fgov.be/en/changes-labour-force-survey-lfs-2021.

3 From 2020, new EU configuration without UK.

Annex 12

Revenue, expenditure and overall balance of general government

(in € million)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 e
Revenue [1]	201 426	208 175	211 755	213 796	218 288	228 517	236 441	238 776	228 978	249 928
Fiscal and parafiscal revenue	173 164	179 089	182 238	185 206	187 625	196 578	203 559	205 135	196 759	215 514
Levies weighing chiefly on earned income	100 724	103 657	105 204	107 012	106 100	109 771	112 638	114 313	113 824	120 814
Personal income tax [2]	44 483	46 131	46 935	47 161	46 849	48 804	50 271	49 866	50 391	53 832
Social security contributions [3]	56 242	57 526	58 269	59 850	59 250	60 967	62 367	64 446	63 433	66 982
Taxes on profits of companies [4]	11 624	12 192	12 585	13 644	14 640	18 098	19 788	17 736	14 943	17 742
Levies on other income and in respect of property [5]	15 433	17 320	17 912	17 510	17 518	17 923	18 198	18 806	17 435	20 004
Taxes on goods and services	45 383	45 920	46 537	47 041	49 368	50 787	52 935	54 280	50 558	56 954
Non-fiscal and non-parafiscal revenue [6]	28 261	29 086	29 517	28 590	30 663	31 939	32 882	33 641	32 219	34 414
Expenditure excluding interest charges	204 634	207 607	211 159	211 825	216 932	221 062	230 539	238 489	261 505	273 010
Social insurance benefits	95 761	99 059	100 878	102 923	106 102	109 350	113 156	117 056	128 586	133 115
Replacement incomes	55 274	57 857	58 778	59 827	61 637	63 539	65 564	67 460	78 264	77 595
Pensions	38 102	39 877	40 817	42 100	43 789	45 735	47 488	49 280	51 320	53 382
Private sector pensions	24 194	25 311	26 029	26 825	27 982	29 306	30 682	32 091	33 638	35 239
General government pensions	13 908	14 566	14 788	15 276	15 808	16 429	16 805	17 189	17 681	18 143
Old people's guaranteed income	456	500	541	545	536	572	577	598	679	718
Unemployment benefits with employer top-up [7]	1 626	1 611	1 548	1 477	1 405	1 269	1 149	891	682	535
Unemployment benefits [8]	6 816	7 080	6 627	6 035	5 738	5 326	5 006	4 752	12 687	9 254
Career breaks and time credit	832	833	831	721	680	659	639	640	666	632
Sickness and disability insurance benefits	6 172	6 622	7 042	7 449	7 843	8 212	8 794	9 350	10 155	10 977
Industrial accidents and occupational diseases	487	505	499	490	487	489	510	523	528	535
Integration allowance	783	830	874	1 010	1 160	1 278	1 400	1 427	1 549	1 562
Other social insurance benefits [9]	40 487	41 202	42 100	43 096	44 465	45 811	47 593	49 596	50 322	55 521
of which:										
Health care	25 931	26 680	27 385	27 966	28 636	29 510	30 642	31 984	31 967	36 274
Family allowances	5 995	6 192	6 282	6 309	6 373	6 498	6 613	6 887	7 051	7 152
Other primary expenditure	108 873	108 548	110 281	108 902	110 830	111 711	117 382	121 433	132 919	139 895
Compensation of employees	49 150	50 694	52 174	52 330	53 619	55 310	56 794	58 656	60 354	62 182
Current purchases of goods and services	16 623	16 536	17 288	17 162	17 567	17 877	18 901	19 443	19 839	20 976
Subsidies to enterprises	14 887	15 363	15 767	15 982	16 005	16 255	16 904	17 929	22 642	22 322
Current transfers to the rest of the world	4 711	5 128	4 782	5 087	5 545	4 284	5 116	5 226	6 076	6 653
Other current transfers	3 660	3 432	3 616	3 459	3 749	3 664	3 922	4 120	7 537	7 318
Gross fixed capital formation	9 593	9 136	10 328	10 388	10 366	10 731	12 071	12 478	12 538	14 434
Other capital expenditure	10 248	8 258	6 328	4 495	3 980	3 591	3 675	3 580	3 934	6 008
Balance excluding interest charges	−3 208	568	596	1 971	1 355	7 456	5 902	287	−32 527	−23 082
Interest charges	13 468	12 863	12 910	12 026	11 519	10 499	9 775	9 410	8 905	8 204
Overall balance	−16 677	−12 295	−12 315	−10 054	−10 164	−3 043	−3 873	−9 123	−41 432	−31 286

Sources: NAI, NBB.

1 In accordance with the ESA 2010, general government revenues do not include the tax revenues transferred to the EU, nor revenues collected directly by the EU.

2 Mainly withholding tax on earned income, advance payments, assessments and proceeds of additional percentages on personal income tax.

3 Total social contributions, including the special social security contribution and the contributions of non-active persons.

4 Mainly advance payments, assessments and the withholding tax on income from movable property payable by companies.

5 Mainly the withholding tax on income from movable property payable by households, the withholding tax on income from immovable property (including proceeds of additional percentages), inheritance taxes and registration fees.

6 Property incomes, imputed social security contributions, current and capital transfers from other sectors and sales of produced goods and services, including activation of capital expenditure for own account.

7 New name for pre-pensions (early retirement).

8 Including temporary unemployment and bridging allowances.

9 Apart from the two main sub-categories mentioned in the table, this item also includes mainly allowances to handicapped persons and transfers to the institutions accommodating them, payments by subsistence funds and pensions to war victims.

Annex 13

Overall balance of general government, by sub-sector

(in € million)

	Entity I			Entity II			General government
	Federal government [1]	Social security	Total	Communities and Regions [1]	Local authorities	Total	
2012	–13 729	–389	–14 119	–745	–1 813	–2 558	–16 677
2013	–10 133	–362	–10 495	–1 060	–740	–1 800	–12 295
2014	–10 171	–153	–10 324	–1 512	–479	–1 991	–12 315
2015	–9 922	788	–9 134	–1 411	491	–921	–10 054
2016	–10 681	–279	–10 960	–129	925	797	–10 164
2017	–5 121	805	–4 316	329	943	1 272	–3 043
2018	–920	–209	–1 129	–2 127	–617	–2 744	–3 873
2019	–8 990	1 298	–7 692	–1 421	–10	–1 431	–9 123
2020	–31 581	888	–30 693	–11 258	519	–10 738	–41 432
2021 e	–21 660	–237	–21 897	–9 448	58	–9 390	–31 286

Sources: NAI, NBB.

1 With effect from 2015, these figures take account of advance payments of the regional surcharges on personal income tax, even though – according to the ESA 2010 methodology – these advance payments should be regarded as purely financial transactions, and the regional surcharges should not be taken into account until the time of the tax assessment. The approach adopted here corresponds to that used for formulating the budget targets set out in the recommendations of the Public Sector Borrowing Requirement section of the High Council of Finance and in the stability programmes.

Annex 14

Consolidated gross debt of general government[1]

(end-of-period outstanding amounts, in € million)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1. Official debt of the Treasury	364 815	371 401	380 599	389 578	404 913	385 668	388 857	393 641	424 570	452 477
In euro	364 815	370 812	380 599	389 578	404 913	385 668	388 857	393 641	424 570	452 477
At up to one year	39 324	32 080	35 116	35 643	37 495	37 432	36 400	38 799	42 296	43 902
At over one year	325 491	338 732	345 484	353 934	367 418	348 236	352 458	354 841	382 274	408 575
In foreign currencies	0	590	0	0	0	0	0	0	0	0
2. Valuation difference[2]	86	28	5 031	4 323	3 684	–129	–116	–129	–139	–156
3. Other adjustments[3]	15	12	9	7	5	3	3	2	1	1
4. Other federal government liabilities[4]	11 832	14 329	16 846	16 903	16 995	16 474	16 442	16 342	16 688	n.
5. Consolidation between federal government units[5]	33 169	33 705	39 638	40 671	42 176	14 895	14 303	13 281	10 943	n.
of which: Ageing Fund assets[6]	19 174	19 963	25 776	25 896	26 076	0	0	0	0	n.
6. Consolidated gross debt of federal government (1 + 2 + 3 + 4 – 5)	343 579	352 065	362 847	370 140	383 421	387 122	390 882	396 575	430 178	n.
7. Consolidated gross debt of Communities and Regions	46 943	47 292	50 866	52 352	59 678	59 094	60 484	63 027	77 955	n.
8. Consolidated gross debt of local authorities	22 190	23 155	25 251	24 603	24 451	23 830	23 726	23 348	23 360	n.
9. Consolidated gross debt of social security	6 610	7 600	7 822	8 177	2 240	2 105	2 015	746	684	n.
10. Consolidation between the general government sub-sectors[7]	14 570	15 679	15 407	16 780	18 181	18 158	17 732	16 496	16 939	n.
11. Consolidated gross debt of general government[1] (6 + 7 + 8 + 9 – 10)	404 752	414 432	431 379	438 493	451 609	453 992	459 375	467 200	515 238	548 892 e

Sources: FPS Finance, NAI, NBB.

1 Concept of debt as defined in Council Regulation (EC) No. 479/2009 of 25 May 2009 on the application of the Protocol of the excessive deficit procedure annexed to the Treaty establishing the European Community.

2 Adjustment to the valuation of Treasury Certificates and Treasury bills to convert the discounted value to the face value, and since 2014, adjustment to the valuation of Ageing Fund assets in the establishment of the Maastricht debt.

3 Adjustments permitting the transition from a net debt concept to the gross debt concept; certain assets being recorded in the official debt of the Treasury.

4 Mainly the debudgetised Treasury debt, the debts of the *Caisse des dépôts et Consignations – Deposito- en consignatiekas* and the RIF (from 2005 to 2008), coins in circulation and the imputed debt resulting from Belgium's participation in the mutual support mechanism of the European Financial Stability Fund (EFSF) (from 2011).

5 Federal government debt, the counterpart of which is an asset of the federal government unit. Since 2014, adjustment to the valuation of Ageing Fund assets in the establishment of the Maastricht debt.

6 Including the capitalised interest on Ageing Fund Treasury Bonds.

7 Debt of a general government sub-sector, the counterpart of which is an asset of another general government sub-sector.

Annex 15

Overview of institutions subject to National Bank of Belgium supervision[1]

(end-of-period data)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Financial holding companies										
Total	*7*	*7*	*6*	*7*	*6*	*5*	*6*	*8*	*8*	*8*
Credit institutions										
Credit institutions governed by Belgian law	42	39	37	37	34	34	32	31	31	30
Belgian branches of credit institutions governed by the law of a non-EEA country	9	10	10	10	8	8	8	6	6	6
Belgian branches of credit institutions governed by the law of another EEA country	53	55	56	52	50	46	47	48	46	47
Total credit institutions	*104*	*104*	*103*	*99*	*92*	*88*	*87*	*85*	*83*	*83*
Payment institutions governed by Belgian law	9	11	15	17	21	24	22	26	33	34
Electronic payment institutions governed by Belgian law	6	10	10	10	8	8	7	7	7	6
Total	*15*	*21*	*25*	*27*	*29*	*32*	*29*	*33*	*40*	*40*
Central securities depositories approved in Belgium										
Total	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
Card payment schemes[2]										
Total	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
Retail payment systems										
Total	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*2*
Financial message service provider										
Total	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*
Insurance and reinsurance companies										
Insurance and reinsurance companies governed by Belgian law	88	84	81	76	73	68	69	68	66	64
Belgian branches of insurance companies governed by the law of another EEA country	46	46	47	43	45	46	46	45	37	34
Belgian branches of insurance companies governed by the law of a non-EEA country	0	0	0	0	0	0	0	0	0	0
According to specialisation										
Life insurance companies	24	23	23	21	22	20	16	16	14	12
Non-life insurance companies	83	81	79	72	70	67	72	71	64	62
Mixed insurance companies	25	24	24	24	24	25	24	24	23	21
Reinsurance companies	2	2	2	2	2	2	3	2	2	3
Total insurance companies	*134*	*130*	*128*	*119*	*118*	*114*	*115*	*113*	*103*	*98*
Freedom to provide services										
Credit institutions	667	673	683	709	640	672	672	677	688	582
Insurance companies	942	933	950	970	999	917	1 095	1 118	1 123	961
Total freedom to provide services	*1 609*	*1 606*	*1 633*	*1 679*	*1 639*	*1 589*	*1 767*	*1 795*	*1 811*	*1 543*
Stockbroking firms with Belgian licence[3]										
Total	*21*	*20*	*20*	*20*	*20*	*19*	*17*	*17*	*14*	*14*

Source: NBB.

1 The list of names of the institutions subject to the Bank's supervision can be consulted on the website: www.nbb.be.

2 Bancontact and Mastercard (including Maestro).

3 In accordance with the allocation of tasks agreed with the FSMA, the Bank also supervises 10 branches of stockbroking firms governed by the law of another EEA country.

Methodological note

Unless otherwise indicated, when data are compared from year to year, they all relate to the same period of the years in question. In the tables, the totals shown may differ from the sum of the items owing to rounding.

In order to provide an update on various key economic data relating to Belgium in the year 2021 as a whole, it has been necessary to make estimates, as the statistical material for that year is sometimes still fragmentary. In the tables and charts, these estimates, which were based on information available on 28 January 2022, are marked "e". They represent mere orders of magnitude intended to demonstrate the trends which already seem to be emerging. The Belgian sources used are mainly the NAI, Statbel and the Bank. The comments on the international environment and the comparisons between economies are usually based on the latest data or estimates originating from institutions such as the EC, the IMF, the OECD and the ECB.

The monetary unit used in the Report for the data concerning the euro area member countries is the euro. Amounts relating to periods before the introduction of the euro, on 1 January 1999 in Belgium and in most of the Member States, are converted at the irrevocable euro conversion rates. Except in the chapters on monetary policy and prices, where the definition coincides with the historical reality, the euro area is defined wherever possible in this Report as consisting of all the EU countries which adopted the single currency during the period 1999-2015. Apart from Belgium, the area therefore consists of Austria, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain. For convenience, the term "euro area" is also used to designate this group of countries for periods prior to the start of Stage 3 of EMU. For some analyses, the preferred source was the OECD which includes in the euro area only the countries which are members of that international institution, i.e. excluding Cyprus and Malta. In view of the small size of those economies, the OECD data are perfectly representative of the euro area as a whole. In this Report, the European Union (EU) comprises the 27 countries which were members at the end of 2021.

For the sake of simplicity, the sectoral breakdown groups together, under the heading "individuals", households and non-profit institutions serving households, which constitute separate sectors according to the ESA 2010 methodology. Nevertheless, the terms "individuals" and "households" are used as synonyms. The terms "corporations", "firms" and "enterprises" are also frequently used as synonyms, whereas in the commentary from the GDP expenditure angle, "enterprises" also covers self-employed people, who are included under households in the real and financial sectoral accounts.

Conventional signs

–	the datum does not exist or is meaningless
e	estimate by the Bank
e.g.	for example
etc.	*et cetera*
n.	not available
p.m.	*pro memoria*
Q	quarter
%	per cent
°C	degree Celsius

Abbreviations

Euro area countries

EA	Euro area
AT	Austria
BE	Belgium
CY	Cyprus
DE	Germany
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
IE	Ireland
IT	Italy
LT	Lithuania
LV	Latvia
LU	Luxembourg
MT	Malta
NL	The Netherlands
PT	Portugal
SI	Slovenia
SK	Slovakia

Other European Union countries

EU	European Union
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
HR	Croatia
HU	Hungary
PL	Poland
RO	Romania
SE	Sweden

Other countries

AR	Argentina
AU	Australia
BR	Brazil
CA	Canada
CN	China
ID	Indonesia
IN	India
JP	Japan
KR	South Korea
MX	Mexico
RU	Russia
SA	Saudi Arabia
TR	Turkey
UK	United Kingdom
US	United States
ZA	South Africa

Other abbreviations

ABEX	Association of Belgian Experts
Actiris	Brussels regional employment office
AES	Adult education survey
AI	Artificial intelligence
AML/CFT	Anti-money-laundering and combating the financing of terrorism
API	Application programming interface
APP	Expanded Asset Purchase Programme
BAR	Brexit Adjustment Reserve
BCBS	Basel Committee on Banking Supervision
BEL20	Brussels stock exchange share index
BLS	Bank lending survey
BRRD	Bank Recovery and Resolution Directive
CBDC	Central bank digital currency
CBFA	Banking, Finance and Insurance Commission
CEC	Central Economic Council
CCP	Central counterparty
CCT	Collective labour agreement
CCyB	Countercyclical capital buffer
Cedefop	European Centre for the Development of Vocational Training
CEIC	Census and Economic Information Center
CET 1	Common equity Tier 1
CMDI	Crisis management and deposit insurance
CNT/NAR	National Labour Board
CO_2	Carbon dioxide
COICOP	Classification of Individual Consumption by Purpose
COVID-19	CoronaVirus Disease 2019
CPB	Central Planning Bureau (Netherlands)

CPAS	Public Centre for Social Welfare
CRD	Capital Requirements Directive
CREG	Commission for Electricity and Gas Regulation
CRM	Capacity remuneration mechanism
CRR	Capital Requirements Regulation
CSC	Common and secure communication
CSD	Central securities depository
CSRD	Corporate Sustainability Reporting Directive
CTIF	Financial data processing unit
DESI	Digital Economy and Society Index
DGS	Deposit guarantee scheme
DGSD	Deposit Guarantee Schemes Directive
DLT	Digital ledger technology
DORA	Digital Operational Resilience Act
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
EDIS	European Deposit Insurance Scheme
EEA	European Economic Area
EEA	European Environment Agency
EFSF	European Financial Stability Fund
EIA	Energy Information Administration
EIOPA	European Insurance and Occupational Pensions Authority
Eonia	Euro OverNight Index Average
ERMG	Economic Risk Management Group
ESA	European supervisory authority
ESD	Effort Sharing Decision
ESA 2010	European System of Accounts 2010
ESCB	European System of Central Banks
ESG	Environmental, social and governance
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EU-ETS	EU Emission Trading Scheme
Eurostat	European Statistical Office
FATF	Financial Action Task Force
FinTech	Financial technology
FIU	Financial Intelligence Unit
FMI	Financial market infrastructure
Forem	Walloon public service for vocational training and employment
FPB	Federal Planning Bureau
FPS	Federal Public Service
FPS ELSD	Federal Public Service Employment, Labour and Social Dialogue
FSAP	Financial Sector Assessment Programme
FSB	Financial Stability Board
FSMA	Financial Services and Markets Authority
FTA	Free Trade Agreement
FTSE	Financial Times Stock Exchange
FTE	Full-time equivalent

G20	Group of 20
GAMMI	Guaranteed average minimum monthly income
GDP	Gross domestic product
G-SIB	Global Systemically Important Bank
GW	Gigawatt
HCE	High Council for Employment
HCF	High Council of Finance
HICP	Harmonised index of consumer prices
IAIS	International Association of Insurance Supervisors
IAS	International Accounting Standard
IBPT	Belgian institute of postal and telecommunications services
ICS	International Capital Standard
ICT	Information and communication technology
IEA	International Energy Agency
IFD	Investment Firms Directive
IFR	International Federation of Robotics
IFRS	International Financial Reporting Standard
IRRD	Insurance Recovery and Resolution Directive
ILO	International Labour Office
IMF	International Monetary Fund
Infrabel	Belgian railway infrastructure manager
InsurTech	Insurance technology
IOSCO	International Organisation of Securities Commissions
IPCC	Intergovernmental Panel on Climate Change
IT	Information technology
JST	Joint Supervisory Team
kg	Kilogramme
kWh	Kilowatt hour
LCOE	Levelised cost of electricity
LCR	Liquidity coverage ratio
LFS	Labour force survey
LRE	Leverage ratio exposure
LSEG	London Stock Exchange Group
LSI	Less significant institution
LTRO	Longer-term refinancing operation
LTV	Loan-to-value ratio
MBtu	One million British thermal units
MiCA	Regulation on Markets in Crypto Assets
MREL	Minimum Requirement for Own Funds and Eligible Liabilities
MSCI EM	Morgan Stanley Capital Emerging Markets
MWh	Megawatt/hour
NACE	Nomenclature of economic activities of the European Community
NAI	National Accounts Institute
NBB	National Bank of Belgium

NEO	National Employment Office
NFRD	Non-Financial Reporting Directive
NGEU	Next Generation EU
NGFS	Network for Greening the Financial System
NIS	Network and information system security
NPI	Non-profit institution
NPL	Non-performing loan
NRPC	National Retail Payments Committee
NSFR	Net stable funding ratio
NSSO	National Social Security Office
OECD	Organisation for Economic Cooperation and Development
OIS	Overnight swap
OLO	Linear bond
OPEC	Organisation of Petroleum Exporting Countries
ORSA	Own Risk and Solvency Assessment
P2G	Pillar 2 guidance
PELTRO	Pandemic Emergency Longer-Term Refinancing Operation
PEPP	Pandemic Emergency Purchase Programme
PMI	Purchasing Manager's Index
PSD	Payment Services Directive
R&D	Research and development
RRF	Recovery and Resilience Facility
RES	Renewable energy source
RWA	Risk-weighted asset
SARS-Cov	Severe acute respiratory syndrome coronavirus
S&P	Standard & Poor's
SCA	Strong customer authentication
Sciensano	Scientific Institute for Public Health
SDG	Sustainable development goal
SCA	Study Committee on Ageing
SCR	Solvency capital requirement
SFDR	Sustainable Finance Disclosure Regulation
SGP	Stability and Growth Pact
SI	Significant institution
SILC	Statistics on Income and Living Conditions
SIPS	Systemically important payment system
SME	Small and medium-sized enterprise
SNCB	Belgian national railway company
SPE	Public employment service
SRB	Single Resolution Board
SREP	Supervisory Review and Evaluation Process
SRF	Single Resolution Fund
SRM	Single Resolution Mechanism
SRMR	Single Resolution Mechanism Regulation
SSM	Single Supervisory Mechanism
Statbel	Belgian statistical office
STEM	Science, technology, engineering and mathematics

TFEU	Treaty on the Functioning of the European Union
TIBER	Threat Intelligence-Based Ethical Red Teaming
TLPT	Threat-Led Penetration Testing
TLTRO	Targeted longer-term refinancing operation
TFP	Total factor productivity
TREA	Total risk exposure amount
TWh	Terawatt hour
VAT	Value added tax
VDAB	Flemish public employment service
UJS	Unemployed job-seeker
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
W_{HN}	Composite indicator of current prosperity “Here and now”
WTO	World Trade Organisation
5G	Fifth generation of wireless networks

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