

D. Operational supervision

1. Banks

1.1 Mapping of the banking and investment sector

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

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

The number of Belgian investment firms fell again, this time by two. The licence of Caceis

Belgium was withdrawn following the transfer of its activities to the Belgian branch of the French bank Caceis, while that of Merit Capital was revoked by the Bank.

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

Table D.1

Number of institutions subject to supervision

(end-of-period data)

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

Source: NBB.

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

Table D.2

Belgian banks grouped according to the SSM classification criteria

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

Source: NBB.

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

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

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

As a result of the abovementioned developments, the Belgian LSI group now includes 16 local and/or specialised banks. This number rises to 24 if financial holding companies, incorporated under Belgian or foreign law,

of smaller institutions are included. When calculating the number of LSIs, the new division between approved and exempt (mixed) financial holding companies (see section C.1.2 below) was not taken into account, as the activities relating to this classification had not yet been completed at the time of writing.

1.2 Supervision priorities

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

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

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

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

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

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

Inspections

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

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



Inspections

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

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

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

The inspection consists of several steps:

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

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

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

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

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

It should be noted that:

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

2. Insurance undertakings

At the beginning of the year under review, the Bank continued to focus on the consequences of the COVID-19 pandemic and the low interest



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

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

2.1 Mapping of the sector

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

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

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

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

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

Table D.3

Number of undertakings subject to supervision

(end-of-period data)

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

Source: NBB.

1 Surety companies and regional public transport companies.

Table D.4

Belgian insurance groups subject to the Bank's supervision

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

Source: NBB.

1 Formerly Navigators Holdings.

Table D.5

Supervisory colleges for insurance undertakings

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

Source: NBB.

1 Formerly Navigators Holdings.

2.2 Supervision priorities

Technical provisions for non-life insurance

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

Technical provisions for life insurance

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

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

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

Portfolio transfers

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

It is important to note that portfolio transfers must be submitted to the Bank for approval.

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

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

Outsourcing

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

Special register

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

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

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

Cyber risk

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

BOX 11

Insurance sector stress tests in 2022

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

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

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



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

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

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

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

3. Financial market infrastructures and payment services

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

¹ <https://www.nbb.be/en/fmi>.

3.1 Mapping of the sector

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

Table D.6

Mapping of the financial market infrastructures and payment services sector

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

Source: NBB.

1 Peer review in Eurosystem/ESCB.

2 The NBB and the ECB act jointly as lead overseers (authorities responsible for oversight).

3 Only for certain Belgian activities – Act of 24 March 2017 on the oversight of payment processors.

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

Belgium has a total of 47 payment institutions and e-money institutions, including European

branches. During the year under review, the Bank again received a steady stream of authorisation applications from applicants with different origins, while various other institutions that had recently been authorised disappeared through alliances with

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

3.2 Supervision priorities

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

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

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

Customer deposits with the Bank of New York Mellon SA/NV (BNYM SA/NV), the Belgium-based subsidiary of the Bank of New York Mellon SA/NV (headquartered in the United States), had already increased during the COVID-19 pandemic, partly because customers considered BNYM SA/NV a safe haven at the

Table D.7

Number of payment institutions and electronic money institutions subject to supervision

(end-of-period data)

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

Source: NBB.

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

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

time and partly because a large amount of liquidity was injected into the system through monetary policy instruments. This "safe haven" effect continued in 2022 due to Russia's invasion of Ukraine.

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

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

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

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