

Commission de Surveillance du Secteur Financier

Annual report 2022

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2022 was again marked by a significant external event that had not been expected, a war at Europe's doorsteps. Besides terrible human consequences, the war had also important consequences on our economy - an energy crisis - as well as on financial markets, with heightened volatility and uncertainty. After a long period of low inflation and even deflationary risks in 2020, inflation was back: 6.3% in Luxembourg, and even 8.4% in the Euro area. Despite these turbulences, Luxembourg's GDP grew by 1.5%, vs. 3.5% in the Euro area. In order to reduce inflation – fuelled in particular by high energy, other commodity and certain food prices - the ECB raised progressively interest rates, and after ten years of zero and negative rates, they moved into positive territory as from July 2022.

The Luxembourg **financial system** remained resilient, and despite a higher cost of borrowing, non-performing loans remained at a low level until year end and into 2023. Banks recorded strong interest income as from the second half of 2022. Rates continued to rise during the first half of 2023.

Throughout 2022, both the CSSF and the Luxembourg Systemic Risk Committee of which it is a member have closely followed the impact of the energy crisis and rising interest rates on the banking and investment fund sectors, including residential real estate, corporates and household indebtedness. This enhanced monitoring will continue in 2023.

The war in Ukraine, the energy crisis but also the global warming have served as a reminder of the urgency to tackle the biggest challenge to humanity: a triple crisis of **climate change**, biodiversity loss and pollution. The European Commission has estimated that additional investments of more than EUR 700 billion annually will be needed to meet the objectives of its ambitious EU Green Deal, REPowerEU and Net Zero Industrial Act. Key provisions entered into force or were complemented in 2022 with regard to both the EU taxonomy and the rules on disclosure and reporting. Sustainability must be a core value of the Luxembourg financial centre, and the CSSF is using all means to ensure that the entities under its supervision implement in a timely way the EU regulatory framework. ESG should be part of every entity's strategy, business plan, as well as risk management. Sufficient expertise is needed at the level of boards and executive management, and remuneration of senior executives should also be tied to ESG KPIs. The CSSF is carefully considering the inclusion, in its risk-based approach supervision, of risks arising from sustainability considerations for the financial sector, and is providing guidance through more than 15 publications, through participation in conferences and exchanges with professional organisations. Implementation of

EU rules and guidance by the CSSF in 2021-22 will be supplemented by supervisory action starting in 2023. In this respect, supervisory convergence and common supervisory actions at EU level will be key to achieve our common objective of timely implementation and avoidance of greenwashing, so as to build and maintain investor confidence in green finance.

Financial innovation is advancing at great speed. In 2022 and the beginning of 2023, the regulatory process continued to support digitalisation of finance, with the pilot regime for market infrastructures based on DLT, DORA, and MiCA. The CSSF will actively contribute to and support the European framework, including a proposed regulation on AI, the Data Act, the European Data Governance Act and the Digital Services Act package. Both our Information Technology Supervisory Team and our Innovation Hub are following and accompanying startups and supervised entities in the digital transition, and issuing guidance through Q&As, white papers and other publications. A particular focus will be on progress made in the area of AI, the use of which will undoubtedly revolutionise asset management in the months and years to come. As with other new technologies, the CSSF's and EU authorities' task will be to provide an adequate framework for the use of AI in finance, taking into account both the advantages and risks associated with AI, so that the technology can be used safely. Another focus will be on so-called crypto exchanges. Whilst virtual asset service providers targeting Luxembourg clients must register as VASPs with the CSSF and follow AML regulation, this is not always the case. A particular challenge are VASPs offering their services globally through social media, thus often also targeting unexperienced young investors. Traditional channels used for educational and warning purposes are often not effective to adequately protect such investors, and we must adapt our communication channels and messages accordingly. The demise of the second largest crypto exchange in the world, FTX, in November 2022 is a reminder of the need to regulate this activity in a comprehensive and global manner. Regulation should be neutral regarding technological developments and business models. But the principle of "same services/activities, same risks, same rules and same supervision" should always be applied so as to safeguard market integrity and protect investors.

Financial education is more than ever needed, with regard to the necessary shift to green finance, as well as the dangers related to the wild west in some

of the crypto markets. Experience has shown that this education should start at primary school with children aged 10 or 11 and continue in secondary school and for adults.

Another focus of the CSSF in 2022 was on prevention of cyber incidents and participation in the EU Commission's work on operational resilience. A key regulation called Digital Operational Resilience Act (DORA) was published in December 2022, entered into force in January 2023 and will be applicable as from January 2025. The objective of this regulation is to develop a single regulatory and supervisory framework for digital resilience in the financial sector, covering ICT governance, ICT risk management, digital operational resilience testing (e.g. advanced penetration testing simulating cyberattacks), a harmonised incident reporting process, managing risks resulting from third party ICT service providers and information sharing. The CSSF is a permanent member of the European Supervisory Authorities' Sub-Committee on Digital Operational Resilience. It is also following the implementation of NIS2 and the eIDAS Regulation, and has started to oversee the first tests under the so-called TIBER framework.

The CSSF needs to adapt to this complex, changing environment without compromising its core mission, consumer and investor protection and contribution to financial stability. **Training** is key, and in 2022, our agents underwent more than 23,000 hours of training, or on average 25 hours of training per agent. At the same time, we are upgrading our **IT infrastructure**, investing in sup-tech solutions and implementing in a systematic way a risk-based approach across all areas of competency.

I take the opportunity to deeply thank all our **agents** for their hard work through the succession of crises, also in 2022. Without such commitment, we would not have been able to discharge our public interest mission.

Claude Marx Director General

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I. Governance and functioning of the CSSF



1. Governing bodies and committees

1.1. CSSF Board

CSSF Board composition

The powers conferred upon the Board notably include the annual adoption of the CSSF's budget and the approval of the financial statements and of the management report of the CSSF's Executive Board, which are submitted to the Board before being presented to the Government for approval. The Board also sets the general policy as well as the annual and long-term investment programmes which are submitted to it by the Executive Board before being submitted for approval to the Minister of Finance. The Board is not competent to intervene in the CSSF's prudential supervisory matters.

ChairwomanMaureen WiwiniusDaniel Croisé
Yasmin Gabriel
Jerry Grbic
Andy Pepin
Camille Thommes
Pascale ToussingSecretaryDanielle Mander

1.2. Resolution Board

The Resolution Board is the internal executive body of the CSSF in charge of the resolution function, i.e. the duties and powers conferred on the CSSF as the resolution authority by the Law of 18 December 2015 on the failure of credit institutions and certain investment firms (BRRD Law), Regulation (EU) No 806/2014 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 (SRM Regulation) and their implementing measures.

Resolution Board composition

Chairman	Romain Strock
Members	Bob Kieffer
	Gaston Reinesch
	Claude Wampach
	Karin Guillaume
Secretary	Nicole Lahire



Left to right: Françoise Kauthen, Claude Wampach, Claude Marx, Marco Zwick, Jean-Pierre Faber

1.3. Council for the Protection of Depositors and Investors

The Council for the Protection of Depositors and Investors (CPDI) is the internal executive body of the CSSF in charge of managing and administering the Fonds de garantie des dépôts Luxembourg (FGDL) and the Système d'indemnisation des investisseurs Luxembourg (SIIL). Its duties and powers are assigned to it by Part Three of the BRRD Law. Its functioning is governed by the provisions of Section 4–2 of the Law of 23 December 1998 establishing the CSSF. The CPDI is the designated authority referred to in point (18) of Article 2(1) of Directive 2014/49/EU of 16 April 2014 on deposit guarantee schemes.

1.4. Executive Board

The senior executive authority of the CSSF is the Executive Board, composed of a Director General and four Directors. It develops the measures and takes the decisions it deems useful and necessary for the fulfilment of the CSSF's mission and its organisation. Moreover, it sets up a five-year "target agreement" with the Minister of Finance. The Executive Board is responsible for the reports and proposals it must submit to the Board and the Government as part of its responsibilities.

Executive Board composition

Director General	Claude Marx	
	Françoise Kauthen	
Directors	Jean-Pierre Faber	
Directors	Marco Zwick	
	Claude Wampach	

Council for the Protection of Depositors
and Investors composition

Chairman	Claude Wampach
	Bob Kieffer
Members	Gaston Reinesch
	Karin Guillaume
Secretary	Laurent Goergen

1.5. Consultative Committee for Prudential Regulation

The Government may seek the advice of the committee, established by the Law of 23 December 1998 establishing the CSSF, concerning any draft law or grand-ducal regulation as regards regulations in the area of the supervision of the financial sector falling within the competence of the CSSF. The CSSF's Executive Board seeks the opinion of the committee on any draft CSSF regulation other than those related to statutory audits and the audit profession. Members of the committee may also seek its advice concerning the implementation or application of prudential regulations overall or for specific questions.

Consultative Committee for Prudential Regulation composition

Executive Board of the CSSF	Claude Marx (Chairman) Françoise Kauthen Jean-Pierre Faber Marco Zwick Claude Wampach
Members	Julie Becker Jerry Grbic Emmanuel Gutton Camille Seillès Camille Thommes Vincent Thurmes
Secretary	Danielle Mander

1.6. Consultative Committee for the Audit Profession

The Government may seek advice from the committee, established by the Law of 18 December 2009 concerning the audit profession, on any draft law or grand-ducal regulation related to statutory audits and the audit profession subject to the oversight of the CSSF. The CSSF's Executive Board seeks the opinion of the committee on any draft CSSF regulation related to statutory audits and the audit profession. Members of the committee may also seek its advice concerning the implementation or application of the legislation regarding the public oversight of the audit profession overall or for specific questions.

Consultative Committee for the Audit Profession composition

Executive Board of the CSSF	Claude Marx (Chairman) Françoise Kauthen Jean-Pierre Faber Marco Zwick Claude Wampach	
Members	Christiane Chadoeuf Emmanuel Dollé Thierry Flamand Emmanuel Gutton Andy Pepin Gilles Pierre Daniel Ruppert Anne-Sophie Theissen Hugues Wangen	
Secretary	Danielle Mander	

1.7. Consultative Committee for Resolution

The Government may seek advice from the committee, established by the BRRD Law, on any draft law or grand-ducal regulation as regards regulations in the resolution field falling within the competence of the CSSF. The Resolution Board seeks an opinion of this committee on any draft CSSF regulation relating to resolution. Members of the committee may also seek its advice concerning the implementation or application of the regulations on resolution overall or for specific questions.

Consultative Committee for Resolution composition

Resolution Board	Romain Strock (Chairman) Karin Guillaume Bob Kieffer Gaston Reinesch Claude Wampach
Members	Jean-Louis Barbier Doris Engel Claude Eyschen Nico Picard Philippe Sergiel Vincent Thurmes
Secretary	Nicole Lahire

1.8. Permanent and ad hoc expert committees

The expert committees assist the CSSF in analysing the development of the different financial sector segments, give their advice on any issue relating to their activities and contribute to the drawing-up and interpretation of the regulations relating to the specific areas covered by the respective committees. In addition to the permanent committees, ad hoc committees are formed to examine specific subjects.

The permanent expert committees are currently the following.

• Anti-Money Laundering Committee

Permanent external members:

The Luxembourg Bankers' Association (ABBL), Association of Luxembourg Compliance Officers (ALCO), Association of the Luxembourg Fund Industry (ALFI), Association Luxembourgeoise des Professionnels du Patrimoine (ALPP), Luxembourg Association for Risk Management (ALRiM), The Institute of Internal Auditors Luxembourg (IIA), Institut des réviseurs d'entreprises (IRE), Administration de l'enregistrement et des domaines (AED), Commissariat aux Assurances (CAA), Financial Intelligence Unit (FIU), Ministry of Finance, Ministry of Justice, Luxembourg District Prosecutor's Office

Investment Fund Managers Committee

CSSF members:

Marco Zwick (Chairman), Pascal Berchem, Géraldine Bouvy, Michel Friob, Jean-Paul Heger, François Hentgen, Alain Hoscheid, Laurent Van Burik, Rudi Dickhoff (Secretary)

External members:

Ravi Beegun, Hermann Beythan, Stéphane Brunet, Ruth Bültmann, Olivier Carré, David Claus, Jacques Elvinger, Jean-Marc Goy, Emmanuel Gutton, Emmanuel-Frédéric Henrion, Alain Kinsch, Corinne Lamesch, Charles Muller, Claude Niedner, Virginie Ng Wing Lit-Boulot, Marilyn Rinck, Pierre Schleimer, Denise Voss, Pierre Weimerskirch, Serge Weyland, Thomas Seale, Julien Zimmer

Observer: Maureen Wiwinius

Capital Markets Committee

CSSF members: Françoise Kauthen (Chairwoman), Marc Limpach, Paul Wiltzius (Secretary)

External members: Julie Becker, Philippe Hoss, Nicki Kayser, Christian Kremer, Henri Wagner

• Audit Technical Committee

CSSF members: Frédéric Tabak (Chairman), Agathe Pignon, Anne Wirard, Pedro Da Costa, Mathieu Antoine (Secretary)

External members: Yohan Blaise, Bettina Blinn, Christelle Bousser, Olivier Lefèvre, Sylvie Testa

2. Human resources

2.1. CSSF staff

As a response to the constant increase in the missions conferred on it, the number of CSSF staff has been growing continuously since 2010. The year 2022 confirmed this trend with the recruitment of 65 new agents. In parallel, 50 agents left the CSSF during the year, which resulted in a net increase of 15 agents and brought the CSSF staff to a total of 968 agents as at 31 December 2022 (+1.57%). This is the equivalent of 874.25 full-time jobs (+1.58%).

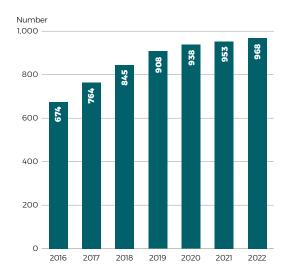
The number of agents with alternate work arrangements (part-time, partial leave, parental leave or unpaid leave) amounted to 257 as at 31 December 2022, representing 26.55% of total staff.

As regards parental leave, it is worth noting that the split leave of eight hours per week, i.e. a 20% reduction in weekly working time, is very popular among CSSF agents and represented 55.56% of all granted parental leaves.

On 7 June 2022, the CSSF introduced the possibility for agents to access teleworking, on a quarterly basis, up to two days per week for full-time agents. This option was chosen by 82% of the agents eligible within the CSSF. An assessment of its efficiency will be carried out in 2023.

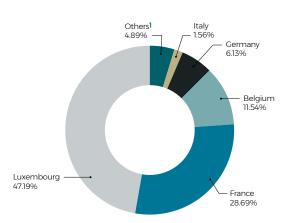
In 2022, the CSSF analysed 3,300 application forms. Recruitment efforts focussed, on the one hand, on IT profiles and, on the other hand, on the strengthening of prudential supervision departments with legal profiles and profiles experienced in the field of AML/CFT. The CSSF continued to be present at recruitment events. Recruitment interviews were held both on-site and by videoconference depending on the applicable health measures.

Movements in staff numbers



CSSF agents represent 17 nationalities, the Luxembourg nationality being the most represented with 47.19% of total staff. However, this percentage decreases from year to year.

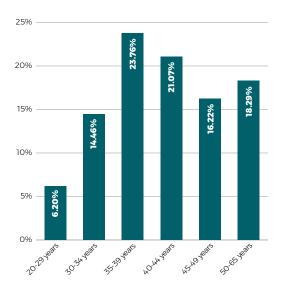
Breakdown of staff by nationality



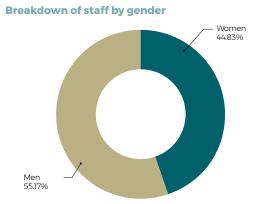
Portugal (0.94%), Spain (0.73%), the Netherlands (0.62%), Austria (0.62%), Poland (0.42%), Romania (0.42%), Bulgaria (0.31%), Greece (0.31%), Ireland (0.21%), Finland (0.10%), Sweden (0.10%) and Slovakia (0.10%)

The average age of the CSSF staff members slightly increased from 40.93 years as at 31 December 2021 to 41.10 years at the end of 2022.

Breakdown of staff by age



Women make up 44.83% of total staff and men 55.17% as at 31 December 2022.



As regards the position of men and women in the hierarchical structure, out of a total of 153 agents with hierarchical responsibility, 46 were women (30.07%) and 107 men (69.93%) as at 31 December 2022.

CSSF hierarchy structure

	Women	Men	Total
Director General	0	1	1
Directors	1	3	4
Resolution Director	0	1	1
Heads of department	9	18	27
Deputy heads of department	19	24	43
Heads of division	17	60	77
Total	46	107	153
In %	30,07%	69,93%	100,00%

2.2. Training

The CSSF has always given special attention to the training of its agents to enable them to deal with the challenges they face in the context of continuous regulatory developments and methodology changes that come with a constantly changing environment.

Today, the CSSF has an extremely broad training catalogue as regards functions and IT as well as management and leadership.

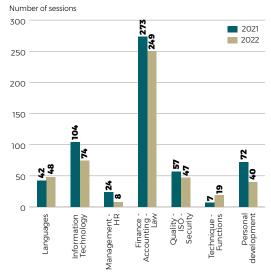
Constraints linked to the health crisis gradually disappeared during 2022. Training courses abroad have resumed progressively in the second half of the year and remote training was slowly replaced by face-to-face training. In 2022, 79.23% of training courses were face-to-face, against 52.51% in 2021. CSSF agents completed a total of 23,800 continuing training hours, averaging 25 hours per agent (compared to 25,770 training hours, averaging 27.53 hours per agent, in 2021).

Besides Luxembourgish courses and French courses introduced in 2021, the training catalogue has been supplemented, in 2022, with courses in Business English focussed on the development of skills in oral expression. "Personal development" remains an important training area of the catalogue, even though a decrease was noted in the number of sessions organised in 2022 compared to 2021. In order to support superiors in their leadership role, the CSSF implemented a "Leadership" training programme. A pilot project was launched in September 2022 before the full deployment in 2023 which will last three years. The objective of this programme is to allow the heads of department, deputy heads of department and heads of division to be excellent experts in their function, while demonstrating at the same time agility in their leadership role as well as open-mindedness so as to take into account the ever-faster development of the CSSF's environment.

The CSSF pursues its efforts in "Lean Management" training. In 2022, 75 agents received basic training in Lean Management, among which 38 were "White Belt" certified and 14 "Yellow Belt". Today, about 7.5% of the CSSF staff is trained in the fundamentals of the Lean Management and in the logic of the Visual Management for activities within the functions and departments.

The "Lean Expert – Green Belt" certification cycles will also continue for at least the next three years. In addition to 26 agents who already successfully completed this certification, 10 other agents started this new certification cycle in January 2023.

In order to face not only the social and environmental but also the sustainable finance regulatory challenges and in line with its vision of a more sustainable financial system, the CSSF launched a training programme in sustainable finance in order to allow agents to make their contribution. This programme started in the fourth quarter of 2022 and will take place stepwise throughout 2023. Certification training is also offered to agents mainly involved in this field according to the CSSF's functions.



Breakdown of training according to topic

2.3. Organisation chart

The organisation chart of the CSSF is available on the CSSF's website (About the CSSF > General organisation > Documentation > Publications).

3. IT infrastructure of the CSSF and information exchange

• Technological innovation and information exchange

A great number of new platforms for data exchange were introduced in 2022.

Many projects were triggered by regulations, others mainly aimed at optimising the existing submission and supervisory processes, thereby contributing to the improvement of the efficiency of the CSSF's IT systems in accordance with the CSSF 4.0 strategy.

In a continued effort to provide high-quality services, the "Information systems" department (IT) faces a paradox between innovation and the treatment of its technical debt. Its IT portfolio consisted of 186 IT projects entailing 333 upgrades and installations during 2022. Thus, the objectives focus on improving the quality of the new versions of the CSSF's IT solutions, while restructuring the existing ones to adapt, as a support function, to the current needs in the operational activities.

Today, two means of information exchange emerge in the context of CSSF 4.0:

- individual submissions via electronic forms on the different activity-related portals;
- batch submissions via secure APIs.

Both are complementary and necessary to meet the heterogeneous needs of the financial industry at local and international level. Indeed, the first means of exchange allows direct interaction between the supervised entities and the CSSF without the need for the entities themselves to implement a new technology. However, the second means of exchange opens the path for a "system-to-system" interaction by any body wishing to perform an automatic data exchange with the CSSF.

In this context, the CSSF will open a new direct secure channel based on the S3 protocol, notably for significant volumes of input data as from 2023.

In addition to the use of traditional channels, the reporting institutions may now benefit from an innovative solution based on APIs to integrate structured data directly into the CSSF's systems.

These solutions are implemented in accordance with the tenet "All Together", i.e. by deeply involving the local and international financial industry through "pilots" in the co-design of future CSSF solutions.

The first stage of the CSSF's "data hub" has thus begun.

4. CSSF library

The CSSF library is a reference library which has been part of the Luxembourg libraries' network bibnet.lu since 2009. It is specialised in banking and financial law as well as in financial economy. It contains around 5,000 books and around 50 periodicals and update publications. The library also has a certain number of specialised electronic databases.

All the books in the library are listed in the general catalogue of the bibnet.lu network. The unified search engine of the collections of the network (www.a-z.lu) enables an easy search of the books available in the CSSF library and in all Luxembourg libraries.

The library is open to the public on prior request and by appointment on working days.

5. Budget and annual accounts of the CSSF - 2022

5.1. CSSF budget

Budget planning is part of a multi-year planning of the CSSF's income and expenses; it thereby allows guaranteeing the financial balance of the CSSF in the long term.

The 2022 budget was approved by the Board of the CSSF on 8 December 2021 and the 2022 annual accounts related to the financial results on 27 March 2023.

The CSSF's finance division closely monitors the budget and draws up monthly reports for the Executive Board. An analysis detailing the gaps between the budgeted figures and the real figures is made at the end of every financial year.

The key factors that have affected the 2022 budget are the following:

- increase in fees to be paid by supervised entities in accordance with Grand-ducal Regulation of 17 December 2021;
- control of operating costs despite the inflation and the problems linked to supply chains;
- operating aid of EUR 10 million received to support the digitalisation efforts of the CSSF (non-recurring aid).

5.2. CSSF annual accounts - 2022

BALANCE SHEET AS AT 31 DECEMBER 2022

Assets	EUR
Fixed assets	54,098,934.89
Intangible fixed assets	2,309,873.48
Development costs	1,361,513.37
Payments on account and intangible assets in progress	948,360.11
Tangible fixed assets	51,789,061.41
Land and buildings	44,769,236.25
Other fixtures, fittings, tools and equipment	6,761,312.80
Payments on account and tangible assets in progress	258,512.36
Current assets	86,923,898.81
Debtors	6,937,067.97
Trade debtors with a residual term of up to one year	5,527,760.40
Other debtors with a residual term of up to one year	1,409,307.57
Cash at banks, in postal cheque accounts, cheques in hand	79,986,830.84
Prepayment and accrued income	7,733,685.60
BALANCE SHEET TOTAL (ASSETS)	148,756,519.30
Own capital and liabilities	EUR
Own capital and liabilities Own capital	EUR 68,740,934.14
Own capital	68,740,934.14
Own capital Results brought forward	68,740,934.14 58,874,582.42
Own capital Results brought forward Result for the financial year	68,740,934.14 58,874,582.42 9,866,351.72
Own capital Results brought forward Result for the financial year Provisions	 68,740,934.14 58,874,582.42 9,866,351.72 25,071,784.55
Own capital Results brought forward Result for the financial year Provisions Other provisions	 68,740,934.14 58,874,582.42 9,866,351.72 25,071,784.55 25,071,784.55
Own capitalResults brought forwardResult for the financial yearProvisionsOther provisionsLiabilities	 68,740,934.14 58,874,582.42 9,866,351.72 25,071,784.55 25,071,784.55 54,943,800.61
Own capital Results brought forward Result for the financial year Provisions Other provisions Liabilities Amounts owed to credit institutions	 68,740,934.14 58,874,582.42 9,866,351.72 25,071,784.55 54,943,800.61 48,971,493.11
Own capital Results brought forward Result for the financial year Provisions Other provisions Liabilities Amounts owed to credit institutions with a residual term of up to one year	 68,740,934.14 58,874,582.42 9,866,351.72 25,071,784.55 54,943,800.61 48,971,493.11 4,768,844.19
Own capital Results brought forward Result for the financial year Provisions Other provisions Liabilities Amounts owed to credit institutions with a residual term of up to one year with a residual term of over one year Debts on purchases and	 68,740,934.14 58,874,582.42 9,866,351.72 25,071,784.55 54,943,800.61 48,971,493.11 4,768,844.19 44,202,648.92
Own capital Results brought forward Result for the financial year Provisions Other provisions Liabilities Amounts owed to credit institutions with a residual term of up to one year with a residual term of over one year Debts on purchases and provision of services	 68,740,934.14 58,874,582.42 9,866,351.72 25,071,784.55 54,943,800.61 48,971,493.11 4,768,844.19 44,202,648.92 3,100,522.88
Own capitalResults brought forwardResult for the financial yearProvisionsOther provisionsLiabilitiesAmounts owed to credit institutionswith a residual term of up to one yearwith a residual term of over one yearDebts on purchases and provision of serviceswith a residual term of up to one year	 68,740,934.14 58,874,582.42 9,866,351.72 25,071,784.55 54,943,800.61 48,971,493.11 4,768,844.19 44,202,648.92 3,100,522.88
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Own capitalResults brought forwardResult for the financial yearProvisionsOther provisionsLiabilitiesAmounts owed to credit institutionswith a residual term of up to one yearwith a residual term of over one yearDebts on purchases and provision of serviceswith a residual term of up to one yearCher debtsTax debts	 68,740,934.14 58,874,582.42 9,866,351.72 25,071,784.55 54,943,800.61 48,971,493.11 4,768,844.19 44,202,648.92 3,100,522.88 3,100,522.88 2,871,784.62 170,062.89

PROFIT AND LOSS ACCOUNT AS

AT 31 DECEMBER 2022

	EUR
Net turnover	142,862,703.16
Other operating income	10,301,244.17
Raw materials and consumables and other external charges	13,789,983.28
Raw materials and consumables	539,740.75
Other external charges	13,250,242.53
Staff costs	117,829,693.25
Wages and salaries	111,023,036.73
Social security costs	4,250,932.15
relating to pensions	556,881.89
other social security costs	3,694,050.26
Other staff costs	2,555,724.37
Value adjustments	5,352,857.11
on formation expenses and tangible and intangible fixed assets	5,352,857.11
Other operating charges	5,521,758.42
Interest and other financial charges	803,303.55
Other interest and financial charges	803,303.55
Result for the financial year	9,866,351.72

Réviseur d'entreprises agréé (approved statutory auditor): EY

II. The European dimension of the supervision of the financial sector



1. Supervision of banks

1.1. Single Supervisory Mechanism (SSM)

In 2022, the CSSF participated in 16 meetings of the SSM Supervisory Board and in seven meetings of the Steering Committee, and contributed to around 2,582 decisions concerning specific supervised entities within the framework of the SSM. The CSSF also contributed at a technical level to the work of a large number of working groups set up by the ECB.

The top three SSM priorities identified for 2022-2024 are ensuring that banks (i) emerge from the pandemic healthy, (ii) seize the opportunity to address structural weaknesses via effective digitalisation strategies and enhanced governance, and (iii) tackle emerging risks, including climate-related and environmental risks, IT and cyber risks.

In the course of 2022, the SSM also had to tackle the emerging risks stemming from the Russian invasion of Ukraine and the impact of the rising interest rates. Due to the war in Ukraine, the SSM started beginning of the year assessing the resilience of the euro area banking sector. The results of the assessment confirmed the banking sector's resilience, considering also secondand third-round effects stemming from the war. More details of the assessment are published on the ECB website¹. In order to analyse banks' sensitivities to interest rate shocks, the SSM conducted a review on interest rate and credit spread risk management practices among a sample of significant institutions particularly exposed to these risks. Results showed a positive impact on profitability driven by net interest income, while capital adequacy would only be marginally impacted. Still, the ECB underlined that it is important that banks continue strengthening their interest rate risk management².

One of the major priorities of the SSM was to address the challenges for banks posed by digital transformation. The SSM conducted a survey on digital transformation and the use of fintech among 105 large banks under direct ECB supervision. Key takeaways of this survey can be consulted on the ECB banking supervision website³. The SSM plans to conduct further work on digital transformation over the next years, including targeted reviews and on-site inspections.

2 Monitoring and managing interest rate risk along the normalisation path (europa.eu)

¹ Assessing the resilience of the euro area banking sector in light of the Russia-Ukraine war (europa.eu)

³ Take aways from the horizontal assessment of the survey on digital transformation and the use of fintech

The SSM also continued its work on climate risk and conducted a stress test to assess the impact of climate-related risks on the banking sector⁴. This exercise should be seen as a learning exercise for both banks and supervisors; no direct capital implications were derived therefrom. The ECB published a final report in December 2022 providing banks with examples and suggestions on how to improve their climate stress testing capabilities based on identified good practices⁵. During the year, the SSM launched a variety of supervisory exercises on climate risk, including a thematic review of banks' capabilities to steer their climate and environmental (C&E) risk strategies and risk profile. The results and key observations of this thematic review are published on the ECB banking supervision website⁶.

IT and cyber risk remained a key point of attention for banking supervision in 2022. The SSM conducted several off-site and on-site activities in this area. For example, a horizontal analysis on IT and cyber risk was launched. IT outsourcing and cyber resilience were identified here as major vulnerabilities. Key observations of this horizontal analysis were published on the ECB banking supervision website⁷.

While national competent authorities remain responsible for the direct supervision of LSIs, the SSM also has an oversight function for these institutions where it aims to ensure that high supervisory standards are applied across the Banking Union. In addition, in 2022, a pilot exercise intended to support the overall objective of improving the consistency of supervisory outcomes for LSIs under European banking supervision was launched.

Additional details on the ECB's LSI oversight initiatives are provided in the LSI Supervision Report 2022⁸.

- 5 ECB report on good practices for climate stress testing
- 6 Walking the talk Banks gearing up to manage risks from climate change and environmental degradation; Good practices for climate-related and environmental risk management and ECB sets deadlines for banks to deal with climate risks (europa.eu)
- 7 Key observations from the 2022 horizontal analysis of IT and cyber risk
- 8 LSI Supervision Report 2022

1.2. Regulatory developments

Following the publication in October 2021 of the European Commission's proposal of a new banking package (CRR3/CRD VI), the Council of the EU reached, in November 2022, after 12 months of negotiations under the Slovenian, French and Czech presidencies, its position (general approach) aiming at finalising the implementation of Basel III reforms.

In its position, the Council of the EU made some adjustments to the CRR3 proposal on the "output floor", as well as on credit risk, market risk and operational risk aspects. New proportionality elements have also been introduced in the disclosure requirements for small and non-complex institutions. Furthermore, the Council of the EU has revised some provisions of the European Commission's CRD VI proposal relating to:

- the fit and proper framework applicable to members of management bodies and key function holders of institutions;
- the cooling-off periods applicable to the staff and members of the governance bodies of competent authorities;
- the minimum requirements applicable to branches of third-country banks.

The European Commission and the Council of the EU are awaiting the forthcoming publication of the position of the European Parliament to allow the start of the tripartite negotiations, scheduled for 2023, with the aim of reaching an agreement on a final version of the banking package CRR3/CRD VI.

⁴ ECB Banking Supervision launches 2022 climate risk stress test

2. Supervision of financial markets

2.1. European Securities and Markets Authority - ESMA

At the level of ESMA, the CSSF participates actively in the work of the Investment Management Standing Committee (IMSC) and its sub-group, the Operational Working Group on Supervisory Convergence (OWG), which are composed of experts of the national competent authorities from Member States, assisted and coordinated by ESMA agents.

All the publications of ESMA are available on the website www.esma.europa.eu. As regards collective management, the following publications and developments are particularly worth mentioning for 2022.

On 3 January 2022, ESMA published a letter responding to the request for support by the European Commission (ref. ESMA34-45-1485) in relation to its report on reverse solicitation, as required under Regulation (EU) 2019/1156 aiming to facilitate the cross-border distribution of undertakings for collective investment. The letter details, among others, the result of the survey conducted among the national competent authorities in relation to the use of reverse solicitation by asset managers in their respective jurisdictions and the impact on passporting activities. The result shows notably (i) that almost all national competent authorities have no readily available information on the use of reverse solicitation either via asset managers or investor associations, and (ii) that several national competent authorities believe that reverse solicitation is used in practice to circumvent the rules of the third-country and EU passport regimes, which raises some concerns in terms of investor protection and unlevel playing field. Consequently, ESMA suggests, among others, to consider the introduction of new reporting requirements allowing the collection of information on reverse solicitation across the EU.

On 20 January 2022, ESMA announced the launch of a new Common Supervisory Action (CSA) with national competent authorities on the valuation of UCITS and open-ended AIFs across the EU. The methodology used in the framework of this CSA as well as the scope, the supervisory expectations and the timeline were developed by ESMA in order to ensure a common supervisory approach. The CSA aims to assess compliance of supervised entities with the relevant valuation-related provisions in the UCITS and AIFM Directives frameworks, in particular the valuation of less liquid assets. The CSSF submitted its report to ESMA at the end of December 2022. It is the third CSA that ESMA and the national competent authorities have launched on asset management, the first two covering UCITS liquidity risk management and supervision of costs and fees in UCITS.

On 3 February 2022, ESMA published its fourth annual statistical report on AIFs, based on data of 2020 (ref. ESMA50-165-1948).

On 16 February 2022, ESMA published the final report (ref. ESMA34-49-437) with its opinion on the review of Regulation (EU) 2017/1131 on money market funds, taking in particular into account the difficulties money market funds (MMFs) faced in March 2020. The opinion includes proposals for the upcoming review of the aforementioned regulation by the European Commission to address notably:

- removing the possibility to use the amortised costs method by LVNAV MMFs;
- decoupling regulatory thresholds from suspensions, gates and liquidity fees applied on redemptions for LVNAV MMFs and public debt CNAV MMFs;
- mandatory availability of at least one liquidity management tool for all MMFs;
- enhancement of liquidity buffer requirements (daily liquidity assets and weekly liquidity assets);
- possibility to temporarily use liquidity buffers in times of stress.

ESMA also proposes complementary reforms aiming to improve crisis preparedness of MMFs, notably by enhancing the reporting requirements to competent authorities and the stress testing framework, by clarifying the requirements on external support and by introducing new disclosure requirements on ratings of MMFs.

On 15 February 2022, ESMA published its first Trends, Risks and Vulnerabilities (TRV) Report of 2022 (ref. ESMA50-165-2058). The report indicates a slowdown of the recovery of financial markets, as the resurgence of the COVID-19 pandemic at the end of 2021 led market participants to revisit their growth and market expectations.

On 18 February 2022, ESMA published data on exposures of AIFs to commercial real estate in the EU as at 31 December 2020 (ref. ESMA50-164-5623). This publication follows the ESRB recommendation on closing real estate data gaps (ref. ESRB/2016/14).

On 29 April 2022, the three European Supervisory Authorities (EBA, ESMA and EIOPA) published their technical advice on the review of Regulation (EU) No 1286/2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs). This advice follows a request from the European Commission received on 27 July 2021 and suggests making significant changes to the aforementioned regulation by considering a broad review of the regulatory framework and by conducting appropriate consumer testing before proposing changes. The recommended changes aim, among others, to improve the presentation of information provided to consumers and to help consumers to compare different products.

On 4 May 2022, ESMA published an update of its guidelines on stress test scenarios (ref. ESMA34-49-446) under Regulation (EU) 2017/1131 on money market funds. These guidelines were implemented through Circular CSSF 22/818 of 29 June 2022. On 17 May 2022, ESMA published a consultation paper concerning draft technical standards on notifications for cross-border marketing and management of UCITS and AIFs. The consultation ended on 9 September 2022 and, after considering the comments received, ESMA published a final report (ref. ESMA34-45-1648), on 21 December 2022, presenting the relevant draft regulatory technical standards (RTS) and implementing technical standards (ITS).

On 31 May 2022, ESMA published a report (ref. ESMA34-45-1673) following the CSA on costs and fees charged by investment fund managers in the EU, which was carried out with the national competent authorities in 2021. In this report, ESMA highlights the importance of supervision in ensuring investors are not charged with undue costs, considering their high impact on investors' returns. Moreover, ESMA invites the national competent authorities to use this opportunity to also consider enforcement actions in cases where a significant regulatory breach was identified, particularly bearing in mind that the area of costs and fees is a priority due to its high relevance for investor protection.

On the same date, ESMA also published a Supervisory Briefing (ref. ESMA34-45-1427) to ensure convergence across the EU with respect to sustainability risks and information to be disclosed by investment funds. This work will help combat greenwashing by establishing common supervisory criteria for national competent authorities, to effectively supervise investment funds with sustainability features.

On 1 September 2022, ESMA published its second Trends, Risks and Vulnerabilities (TRV) Report of 2022 (ref. ESMA71-99-2006). The report refers to the conflict between Ukraine and Russia in the context of increasing inflation which profoundly impacted the risk environment of EU financial markets and also informs about the risks of further financial market corrections.

On 17 November 2022, the three European Supervisory Authorities (EBA, ESMA and EIOPA) published their questions and answers regarding RTS to be used by financial market participants in order to disclose sustainability-related information in the framework of Regulation (EU) 2019/2088. On 18 November 2022, ESMA launched a consultation to gather external stakeholders' feedback on certain draft guidelines for the use of ESG or sustainability-related terms in funds' names. ESMA intends to publish the final version of these guidelines in 2023.

On 30 November 2022, ESMA published a final report (ref. ESMA50-164-6583) presenting the updated guidelines on specifications regarding the type of scenarios of stress tests and their calibration so that managers of MMFs have the information needed to fill in the corresponding fields in the reporting template referred to in Article 37 of Regulation (EU) 2017/1131 on money market funds. This update is in line with the process for the regular update of guidelines in order to take into consideration the latest market developments. The guidelines were implemented through Circular CSSF 23/831 of 23 March 2023.

On 9 December 2022, ESMA published a document containing hyperlinks as well as summaries of national rules governing marketing requirements under Regulation (EU) 2019/1156. The content of this document is mostly based on information provided by the national competent authorities.

2.2. ESMA's contribution to the conception of sustainability reporting standards

In light of the imminent entry into force of the EU Corporate Sustainability Reporting Directive (Directive (EU) 2022/2464 - CSRD), the European Commission has mandated the European Financial Reporting Advisory Group (EFRAG) to devise draft European Sustainability Reporting Standards (ESRS).

During the summer 2022, relying on the work of its Corporate Reporting Standing Committee (CRSC) and the latter's Narrative Reporting Working Group (NRWG), on both of which the CSSF is represented, ESMA participated in EFRAG's public consultation on the first batch of draft ESRS.

In parallel, leveraging on the aforementioned resources, ESMA also took part in the public consultation organised by IFRS Foundation's International Sustainability Standards Board (ISSB) on the first two draft IFRS Sustainability Disclosure Standards (IFRS S).

In November 2022, ESMA received a request from the European Commission to provide an opinion on the technical advice on the first set of ESRS, further to ESMA's newly entrusted competence by virtue of the fifth subparagraph of Article 49 (3b) of the Accounting Directive (Directive 2013/34/EU) as amended by the CSRD. Calling on its CRSC and NRWG, ESMA issued such formal opinion on 26 January 2023.

3. Cooperation within other European bodies

• European Insurance and Occupational Pensions Authority (EIOPA)

In 2022, Luxembourg participated in the stress test exercise coordinated by EIOPA, as a follow-up on the stress tests of 2015, 2017 and 2019. The CSSF participated in this exercise through a sample of defined benefit schemes subject to the Law of 13 July 2005 on institutions for occupational retirement provision (IORPs) in the form of pension savings companies with variable capital (SEPCAVs) and pension savings associations (ASSEPs). This sample represented 69% of the total gross assets of the defined benefit schemes of the IORPs supervised in Luxembourg. The other schemes that took part in the stress test were defined contribution schemes of the IORPs subject to the supervision of the Commissariat aux Assurances.

The adverse scenario of the 2022 stress test aimed to simulate a sudden transition to a greener and carbon-neutral economy due to the failed or delayed implementation of climate policy measures. Developed at the beginning of 2022 together with the ESRB and the ECB and calibrated based on the scenario developed by the Network for Greening the Financial System (NGFS), this stress test scenario was characterised by a sharp rise in carbon prices and by several impacts on the financial markets, including an increase of the risk-free interest rates. Furthermore, as in 2019, the 2022 stress test exercise included a qualitative questionnaire covering environmental, social and governance (ESG) criteria and the consideration of ESG factors in the investment policy and risk management of the IORPs. Finally, the stress test included a questionnaire on inflation, particularly to analyse its impact on the level of benefits and contributions and to have an overview of the possible changes in the investment strategy contemplated by the IORPs given the current economic context.

In December 2022, EIOPA communicated the results of the exercise by pointing out that the IORPs which participated in the 2022 stress test have a material exposure to transition risks, although the post-shock funding ratios in defined benefit schemes remain satisfactory in most participating countries. EIOPA also highlighted the significant increase, compared to the 2019 exercise, of the share of IORPs which consider ESG factors when determining their investment policy even though some IORPs still experience difficulties in defining and identifying sustainable financial assets and investing in them. For defined benefit IORPs domiciled in Luxembourg, the results are consistent with EIOPA's observations and show a good resilience of the sector due to the satisfactory funding ratios kept by the IORPs and the IORPs' sponsors capacity to provide support as a security mechanism.

III. Macroprudential supervision of the financial sector



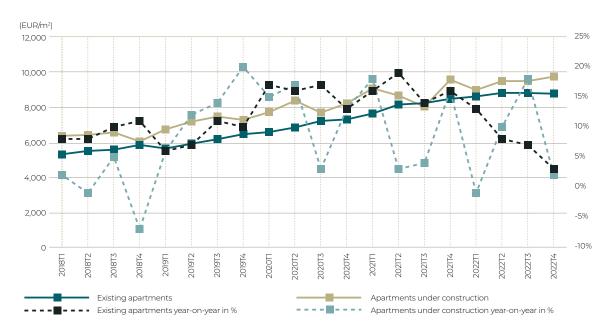
The CSSF actively contributes to the supervision of macroprudential risks through its participation in national and European discussions. It sits as a member authority on the Systemic Risk Committee (Comité du Risque Systémique – CdRS), the European Systemic Risk Board (ESRB) and the ECB. Several themes are discussed in these forums, namely (i) the review of the macroprudential framework, (ii) the vulnerabilities in residential and commercial real estate, (iii) the macroprudential regulation for the non-bank sector, (iv) the reinforcement of the resilience in a context of uncertainty (rising interest rates, inflation, etc.), and (v) the climate-related regulatory challenges or cyber risk. At the national level, the focus in 2022 remained on the situation of the real estate market and its relationship with the financial sphere.

• The production of new residential real estate loans decreases but household indebtedness remains high.

In 2022, real estate prices kept increasing (3% year-on-year for existing apartments and 2% for apartments under construction¹). Meanwhile, new loan production decreased by 17% compared to 2021. Total mortgage loans granted in the residential real estate sector reached EUR 9.3 billion in 2022, down from EUR 11.2 billion in 2021².

2 Source: BCL statistical reporting

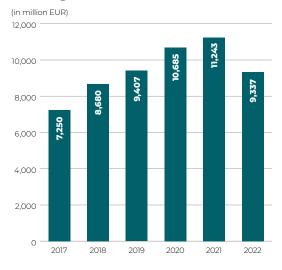
¹ Source: Observatoire de l'Habitat



Apartment price developments in Luxembourg $(in EUR/m2 and in \%)^3$

Household indebtedness amounted to 181%⁴ of gross disposable income, of which 140% was linked to mortgage debt, implying a high exposure of Luxembourg households to the real estate sector. This debt exposes households to economic shocks, especially to an increase in interest rates, a deterioration in the labour market or significant inflation.

Mortgage credit granted for properties located in Luxembourg⁵



More precisely, the average Loan-To-Value (LTV) ratio decreased by 3.4 percentage points between the first and second half of 2022, reaching a level of

In 2022, some key indicators measuring borrowers'

exposure to risk improved while some others

deteriorated.

72.4% in the second half. There is a similar trend for both first-time buyers and the rental segment. The percentage of loans granted with an LTV ratio above 90% decreased by 2 percentage points (from 26% to 24%) between the first and second half of 2022.



Loan-to-Value ratio according to Regulation CSSF No 20-08⁶

3 Source: Observatoire de l'Habitat

4 Source: Eurostat ESA 2010

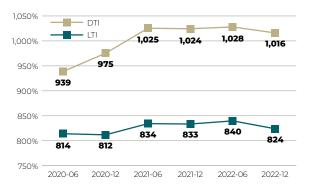
5 Source: BCL statistical reporting

6 CSSF reporting under Circular CSSF 18/703

The Loan-To-Income (LTI) and Debt-To-Income (DTI) ratios respectively measure the value of mortgage debt and the value of total household debt in relation to the total income of the borrower. While the average borrower had an LTI of 824% in the second half of 2022, this ratio had reached 840% six months earlier. Equally, the average DTI ratio decreased from 1,028% during the first six months of 2022 to 1,016% during the last six months of the same year.

As for the distribution, in the second half of 2022, about 48% of new loans were granted to households with mortgage debt exceeding eight times their annual income and 51% of new loans were granted to households with total debt that is nine times their annual income⁷.

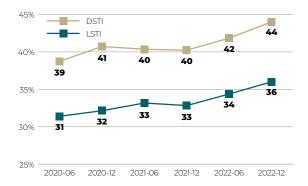
Average Loan-To-Income and Debt-To-Income at origination⁸



For the Debt-service-To-Income (DsTI) ratio, the average increased from 42% to 44% between the first and second half of 2022. The Loan-service-To-Income (LsTI) ratio also increased from 34% to 36%. Regarding the distribution, in the second half of 2022, 16% of new loans were granted to households that would then have to spend more than 50% of their income to cover the mortgage debt burden and 30% of new loans were granted to households that now spend more than 50% of their income to cover their total debt burden.

Adverse developments, including the rise in interest rates (for variable rate loans) and the decrease in purchasing power due to inflation, might expose such households into unsustainable loan arrangements. In this context, the CSSF closely follows the evolution of vulnerable households and its implications for financial stability.

Average Loan-service-To-Income and Debt-service-To-Income at origination⁹



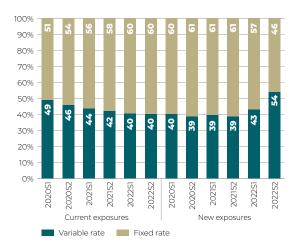
8 CSSF reporting under Circular CSSF 18/703

⁷ All proportions are expressed as proportion of the total amount of loans issued in that period.

⁹ CSSF reporting under Circular CSSF 18/703

As regards the share of variable interest rate mortgages, the trend is different between stock and new loans. Variable rate loans tended to decline in the past years but this trend has been reversed in the new production in 2022 due to the rapid rise in fixed interest rates during this period.

Distribution of variable and fixed rate loans for mortgage loans with mortgage guarantees located in Luxembourg¹⁰



• The economic environment in 2022 did not allow the commercial real estate market to return to its pre-pandemic level of activity.

In both 2021 and 2022, the total annual transaction volume was around EUR 1 billion, compared to EUR 2 billion in 2018 and 2019. In addition to the accelerated development of e-commerce and new teleworking practices, the rise in mortgage interest rates has increased the cost of credit. All these factors resulted in a less favourable macroeconomic environment for the commercial real estate market.

Cumulative transaction volume of investment in commercial real estate in Luxembourg¹¹

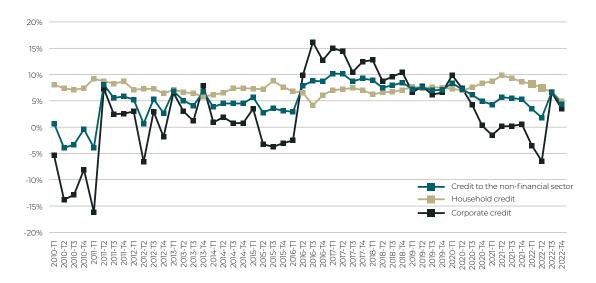


• The macroprudential measures implemented contributed to strengthen the resilience of the Luxembourg financial sector.

In the real estate sector, in addition to the 15% minimum threshold on risk weights applied by banks using internal rating-based systems, CSSF Regulation No 20-08, which links the amount of loan a household can borrow for the acquisition of a residential property to its own funds contribution, helped to reduce leverage. As mentioned above, the average Loan-To-Value ratio for new loans decreased to 72.4% in the second half of 2022.

In 2022, in consultation with the BCL and following the CdRS recommendation, the CSSF decided to maintain the countercyclical capital buffer at 0.5% in order to ensure, firstly, the resilience of the banking sector and, secondly, a positive buffer level to be released in case of materialisation of cyclical risks. At the end of 2022, the ratio of credit to GDP reached 97.7% compared to 100.1% in 2021.

¹¹ Source: MSCI Real Capital Analytics (RCA)



Credit to the non-financial private sector – growth rate year on year¹²

Finally, in the framework of the identification of systemically important banks in Luxembourg, an additional capital requirement of 0.5% was imposed on the six designated banks in order to reduce their probability of default, taking into account the high economic and social costs that such a default could cause. Of the six designated banks, four were

designated on the basis of the EBA's standard methodology (EBA/GL/2014/10) and two were designated on the basis of supervisory judgement. The designated institutions below are the same as in 2021 and represent 25% of the total assets of the banking sector in Luxembourg.

Name	Buffer rate applicable as at 1 January 2022	Buffer rate applicable as at 1 January 2023
Banque et Caisse d'Épargne de l'État, Luxembourg	0.5%	0.5%
Banque Internationale à Luxembourg	0.5%	0.5%
BGL BNP Paribas	0.5%	0.5%
Clearstream Banking S.A.	0.5%	0.5%
RBC Investor Services Bank S.A.	0.5%	0.5%
Société Générale Luxembourg	0.5%	0.5%



IV. The international dimension of the CSSF's mission



1. Basel Committee on Banking Supervision

The CSSF participates in the work of the Basel Committee, the main sub-committees (Policy and Standards Group, Supervisory Cooperation Group and Risks and Vulnerabilities Assessment Group) and some expert groups which are particularly relevant for banking supervision in Luxembourg. These groups are dedicated to the fight against money laundering and terrorist financing, accounting, credit and large exposures, liquidity, subjects covering operational aspects such as digitalisation, or complementing measures aiming at combating the effects of global warming.

In 2022, the macroeconomic and geopolitical challenges dominated the agenda of the Basel Committee's meetings. It should be borne in mind that the Committee was established in 1974 precisely to serve as an international coordination forum for prudential policies and measures in times of adversity. In parallel, the Committee progressed in its structural work programme, notably in the evaluation of the adequacy of the Basel III framework, which was published on 14 December 2022. As regards digitalisation and climate-related risks, the publication of a standard specifying the prudential treatment of cryptoassets (16 December 2022) is also worth mentioning, as well as the publication of guidelines on climate risk management (*Principles for the effective management and supervision of climate-related financial risks*, 15 June 2022).

The Basel Committee's publications and information on its mission and organisation are available on the website www.bis.org.

2. International Organization of Securities Commissions

The CSSF participates in the work of the International Organization of Securities Commissions (IOSCO) via the main (sub-)committees and other working groups, such as for instance the Financial Stability Engagement Group (FSEG), Committee 5 on Investment Management, the Assessment Committee and the European Regional Committee, which are particularly relevant in the context of the development and monitoring of the implementation of internationally recognised standards relating to the regulation of securities markets. In 2022, besides the 47th annual conference which was held in Marrakesh, IOSCO's work mainly focussed on the topics addressed by the FSEG and Committee 5.

Since the beginning of the COVID-19 pandemic, the FSEG, which was established by IOSCO at Board level, has been intensely collaborating with the Financial Stability Board (FSB) as regards financial stability issues (including notably the resilience of non-bank financial intermediation - NBFI). In this respect, several exchanges took place between IOSCO and the FSB, which resulted in the publication of the G20 Progress Report on Enhancing NBFI-Resilience in November 2022, and of the report Assessment of the Effectiveness of the FSB's 2017 Recommendations on Liquidity Mismatch in Open-Ended Funds in December 2022. The work focussed, in particular, on liquidity risk and its management in open-ended funds.

In the same context, IOSCO published, in November 2022, the results of a thematic review assessing the implementation of selected recommendations issued in 2018 to strengthen the liquidity risk management practices for collective investment schemes globally. The review found that larger jurisdictions show a high degree of implementation of regulatory requirements consistent with the objectives of these recommendations. Luxembourg has been assessed as fully compliant.

IOSCO's publications and information on its mission and organisation are available on the website www.iosco.org.

3. The MiFIR third-country national regime

In 2022, the CSSF continued analysing files submitted by third-country firms in relation to the provision of cross-border investment services by non-EU/EEA firms to clients in Luxembourg under the national third-country regime permitted under Regulation (EU) No 600/2014 (MiFIR). This regime, as well as the conditions to be met by firms to make use of it, are described at length in Circular CSSF 19/716. Circular CSSF 20/743, which complements Circular CSSF 19/716, clarifies the criteria that firms need to take into account to make their own assessment of whether their services are deemed to be provided in Luxembourg (the principle of territoriality).

In conjunction with Circular CSSF 19/716, as amended by Circular CSSF 20/743, and in particular the national third-country regime under MiFIR, the CSSF has followed up on the equivalence of the regimes of Canada, the Swiss Confederation, the United States of America, Japan, the Hong Kong Special Administrative Region of the People's Republic of China and the Republic of Singapore through CSSF Regulation No 20-02, as well as the equivalence of the United Kingdom of Great Britain and Northern Ireland through CSSF Regulation No 20-09.

On 20 July 2022, CSSF Regulation No 20-02 was amended by CSSF Regulation No 22-04, which lays down the equivalence of the People's Republic of China and of Australia with respect to supervision and authorisation rules for the purpose of providing investment services or performing investment activities and ancillary services by third-country firms.

V. Financial innovation

In 2022, the regulatory process continued to support digitalisation and, in this context, the year was driven above all by the first work on the implementation of initiatives resulting from the European Commission's Digital Finance Package of 24 September 2020.

While the proposed Regulation on Markets in Crypto-assets (MiCA) is about to be voted on, the pilot regime for market infrastructures based on distributed ledger technology (DLT) has been effective since 23 March 2023 and the Digital Operational Resilience Regulation (DORA), which entered into force on 16 January 2023, will apply as from 17 January 2025.

Considering the workload generated by the implementation of these texts and the potential disruptive effect on the financial sector, the CSSF is getting organised to prepare the market and to comply with its new obligations.

However, the work of the CSSF's Innovation Hub does not only focus on these themes, but already involves scanning the horizon to monitor in real time the developments of many other initiatives of the European Commission which will contribute to further digitalisation in the near future, even if these initiatives are not necessarily all specific to the financial sector, such as the proposed regulation on artificial intelligence, the Data Act, the European Data Governance Act and the Digital Services Act package (Digital Services Act, Digital Market Act).

In this world undergoing a transition, the Innovation Hub, whose objective is to follow and accompany the digital transition of the sector, has made good progress and has now positioned itself as an important interlocutor in the field of financial innovation and digital finance in Luxembourg.

One of the missions of the Innovation Hub is to act as a single point of contact at the CSSF to discuss any subjects related to innovation and new technologies, in particular the processing of innovative products, services and business models from a regulatory point of view, to answer questions and to assist the persons seeking information in identifying the competent departments and organising meetings or coordinating cross-sectoral files. Due to an increased visibility, the Innovation Hub was solicited by 48 entities¹, both FinTechs and traditional players already authorised, in 2022. All these entities were looking for either guidance or concrete support for registration, authorisation or extension of authorisation.

These entities were very diverse and were based either in Luxembourg or elsewhere. In this last case, the meetings took place in the context of projects for which these entities want to set up in Luxembourg.

Many of the entities contacting the Innovation Hub are start-ups and often present projects that are not mature enough. The Innovation Hub meets with them in their beginning phase to guide them on the regulatory framework and on the best way to interact with the regulator when the project matures and the legal memorandum and proof of concept are established. This early interaction has the advantage of allowing the Innovation Hub to follow new financial market trends in Luxembourg proactively and at an early stage and, if necessary, to adapt its internal priorities to the given themes.

Only a minority of the projects presented in 2022 were sufficiently developed legally and technically to start the authorisation process, in which the Innovation Hub assisted as an internal coordinator in collaboration with the CSSF departments concerned.

Tokenisation – security tokens

Regarding the themes covered by the projects presented at the Innovation Hub, the emphasis remains on virtual assets and the application possibilities of DLT technologies in the financial sector, with a majority of projects in the field of fundraising from the public through tokenisation.

The principle of tokenisation implies that a participant in such a project receives digital tokens that allocate certain rights to its holder against the holder's participation in the financing of the project. These rights are freely defined by the initiator and may take different forms. Therefore, it is crucial that initiators of such a project provide a detailed reasoned opinion to the CSSF to determine

1 This number does not include requests where there was only an initial email exchange without further follow-up, nor those concerning the provision of services in virtual assets which are handled by another department within the CSSF. the different rights attached to these tokens, allowing them to be legally qualified. If these tokens qualify, for example, as virtual asset or financial instrument, the Innovation Hub, together with the different specialised departments of the CSSF, will then be able to guide the initiators with respect to the applicable regulatory frameworks. Considering the confusion in many files, it should be underlined that the same token cannot fall within the legal regime of the 5th AML Directive on the registration of virtual asset service providers and under the regulatory framework applicable to security tokens fulfilling the conditions of a financial instrument within the meaning of MiFID, as the two regimes are mutually exclusive.

In 2022, some entities of the traditional financial sector (notably banks) were also interested in the possibilities offered by the tokenisation and in this context, the Innovation Hub could accompany, together with several CSSF departments, the first issuance of native blockchain bonds in application of the national blockchain laws 1² and 2³. This project confers for the first time the status of central account keeper, as provided for in blockchain law 2, on a bank branch in Luxembourg. The interest in these laws does not stop there as other related projects are in progress.

In the context of security token issuance, it is important to note that some owners of projects, presented in 2022, have already expressed their interest in the future DLT pilot regime and will be monitored by the Innovation Hub in 2023.

Crypto-assets

Projects around crypto-assets submitted to the Innovation Hub by financial sector professionals already authorised by the CSSF (including banks and investment firms) are rarer. They seem to be in a phase of observation and waiting for the entry into force of the MiCA Regulation. There are indeed relatively few entities that communicate their intentions at this stage with regard to a possible strategy or activity in crypto-assets. The Innovation Hub cannot therefore accurately assess whether the interest in crypto-assets will spread evenly through the different financial sector activities and whether traditional players will be interested in this type of

² Law of 1 August 2001 on the circulation of securities (coordinated version)

³ Law of 6 April 2013 on dematerialised securities (coordinated version)

service, as opposed to those players who are already registered as virtual asset service providers and wish to continue their activities under the new legal framework.

It is worth mentioning that the regulator must, in this context, remain neutral and maintain a flexible regulatory approach in order not to hinder new opportunities by creating excessive barriers to innovation. Supervised entities should be granted sufficient freedom to develop and adopt a personalised, future-proof digital strategy, in compliance with their business models and their fundamental values.

• RegTech

A major part of the Innovation Hub's interactions concerned the very diverse category of so-called RegTechs, whose objective is the provision of tools for applying technological innovations to enable a supervised entity to meet regulatory, compliance and reporting requirements.

These tools include the types of business models already encountered in 2021 related to solutions in the areas of know-your-customer, analysis/supervision of traditional or virtual asset-related transactions, onboarding of remote clients, data governance, data aggregation and provision, and regulatory and cybersecurity reports. For the first time, there are also some ESG data providers, which goes hand in hand with the entry into force at European level of texts on transparency and publication of information.

Although most RegTechs do not need to comply with the authorisation requirements, it is important for the Innovation Hub to meet with them to gain visibility and follow these innovative solutions that often simplify or even revolutionise traditional processes.

Artificial intelligence

In 2022, the Innovation Hub was less requested for projects using artificial intelligence, which does not mean that interest in these solutions has decreased, far from it: both traditional players in the financial sector and start-ups are implementing multiple projects and various solutions that use machine learning, NLP (Natural Language Processing), RPA (Robotic Process Automation), Computer Vision, chatbots, etc. Nevertheless, considering the early stage of adoption of these technologies in the Luxembourg financial sector and also in the absence of a regulatory framework (pending the finalisation of the Artificial Intelligence Act), few supervised entities proactively contacted the Innovation Hub to share their projects regarding the use of artificial intelligence, and most of these exchanges were in response to requests for information from the CSSF. Regarding the non-supervised entities (e.g. start-ups and FinTechs in general), contact with the Innovation Hub often came from the RegTechs using artificial intelligence (mostly NLP technologies) within their solutions (e.g. data providers active in the ESG sector).

If there is no spontaneous contact, it is even more important to carry out real market monitoring to measure the level of adoption of solutions in this area, particularly among the entities supervised by the CSSF, and to identify the typology in order to measure the risks at an early stage. As with any field monitored by the Innovation Hub, the aim is to identify areas in which targeted actions could be necessary for the protection of financial consumers, market integrity or financial stability.

Networking

In 2022, the Innovation Hub continued its networking initiatives with the aim of acquiring specific knowledge, in particular technical knowledge and knowledge related to the sector's expectations. Exchanges with the stakeholders of the financial sector enable it to be aware of the concrete problems faced by the sector, to identify possible regulatory obstacles or gaps resulting from specific sectoral laws and to search for solutions in a coordinated way. Thus, the Innovation Hub meets with the professional associations of the financial sector several times a year in order to provide a regulatory update, to allow them to ask questions to the Innovation Hub, accompanied, where appropriate, by specialists from different departments of the CSSF, and to have a free exchange on the observed issues and trends. These meetings have now become a must in the Luxembourg ecosystem to keep each other up to date on important issues. The Innovation Hub also organises networking initiatives to exchange with other important players from the Luxembourg ecosystem such as the BCL or organisations like Luxembourg for Finance (LFF), LHoFT and the University of Luxembourg.

Challenges for 2023

The work for 2023 is a logical continuation of the work done in 2022 and will consist, for the Innovation Hub, in supporting the transition to more digital finance by monitoring innovation and financial technology developments, in particular to assess, at an early stage, the impact of new technological or regulatory developments on the Luxembourg financial sector and to define the approach and the concrete measures to adopt, where appropriate.

That being said, some priorities will apply to the Innovation Hub:

- In order to control the impact of the new regulations and to ensure the security and soundness of the financial sector as well as to protect consumers and manage risks, it is necessary to adopt a proactive approach and to provide some clarification on new activities and risk mitigation. Consequently, it is important to centralise the sector's questions and to develop uniform answers, while providing guidance.
- Efforts regarding upgrade must be undertaken at the same time within the CSSF to inform and raise awareness of the new obligations, while ensuring that skills are upgraded. The transversality of the texts also requires close cooperation between departments to ensure compliance.
- Participation in many national and international fora is essential to achieve a uniform application of new texts across Member States, to contribute to the preparation of many Level 2 and Level 3 texts within the European supervisory authorities and, above all, to ensure supervisory convergence in the interpretation of the new definitions and implementation measures for previously largely unregulated areas, in particular to avoid forum shopping by entities that will try to approach jurisdictions they consider less stringent.

VI. Sustainable finance

For several years, environmental, social and governance (ESG) factors have been at the top of the regulatory agenda in all sectors.

Luxembourg's important position in the financial world gives it a key role in accompanying the transition of the financial sector. The redistribution of capital to sustainable investments represents an opportunity for Luxembourg to distinctively contribute to the private financing of the EU green deal and to sustainability in general.

The year 2022 was marked by the establishment of the building blocks of the regulatory framework for sustainable finance. Although some of the legislative work has already been formalised at European level, much of the implementation work will continue in 2023 and the financial sector will need to pursue its efforts to confirm Luxembourg's pioneering role in sustainable finance. The CSSF, as a regulator, must integrate ESG factors in all its missions in order to efficiently guide the transformation of the financial sector, while preserving the conditions of financial stability.

In 2023, as in 2022, the CSSF will continue to make the transition of the financial sector and its actors a priority, by focussing on:

- a risk-based supervisory approach founded on reliable data;
- awareness-raising and financial education;
- active participation in international and European forums for the development and harmonisation of sustainable finance requirements.

This summary outlines the recent developments in the regulatory framework applicable to sustainable finance and how the CSSF intends to play its role in preparing and assisting the financial sector in the emergence and application of the new rules.

1. Recent developments in European regulation

Several key dates in 2022 and the beginning of 2023 relating to the establishment of the regulatory framework applicable to sustainable finance should be highlighted.

1.1. Transparency requirements and taxonomy

The establishment of transparency requirements and the development of a European taxonomy to categorise activities considered sustainable are well under way, and started with Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR) and Taxonomy Regulation (EU) 2020/852.

Their implementation proceeded at a sustained pace with, in particular, the entry into force on 1 January 2023 of a first version of the regulatory technical standards (RTS) detailing the content and presentation of the information to be disclosed under SFDR. This version was closely followed by the entry into force of a new version of the RTS on 20 February 2023, including activities in the nuclear and gas sectors.

The European taxonomy development also continues with the obligation, from 1 January 2023, for non-financial companies to publish information on their taxonomy alignment, while financial institutions will have to start reporting this information from 2024.

In addition to the existing provisions, the European Commission also proposed two draft delegated acts particularly aimed at establishing and supplementing the technical criteria for determining that certain economic activities substantially contribute to the objectives set by the Taxonomy Regulation.

1.2. Development of new financial and extra-financial standards

In parallel, the development of the regulatory framework continued to focus on the provision of reliable sustainability-related disclosures by companies. Adopted on 28 November 2022 by the EU, the Corporate Sustainability Reporting Directive (CSRD) completed the SFDR and Taxonomy Regulation. The phased implementation of this directive will enable the financial markets to build a database of comprehensible and reliable information on sustainable development, eventually requiring the production of a sustainability report for all companies falling within its scope.

In this context, the establishment of uniform accounting standards is a crucial challenge in the implementation of the directive, as demonstrated by the European Commission's intention to prioritise the finalisation of European Sustainability Reporting Standards (ESRS), which should be adopted in 2023.

1.3. Integration of sustainability-related aspects into traditional corporate governance and risk management arrangements

In order to ensure the resilience of the financial sector to climate-related risks, the integration of sustainability-related aspects into traditional risk management and corporate governance tools is also a central element of the regulatory framework that is attracting increasing interest from international institutions.

The ECB's priorities identify exposure to climate-related and environmental risks as a major vulnerability for the banking sector.

In December 2022, the Implementing Technical Standards (ITS) for prudential disclosures on ESG risks in accordance with Article 449a of Regulation (EU) No 575/2013 were published. These standards specify the formats and templates and provide instructions to harmonise the disclosure of information on ESG risk exposures by in-scope credit institutions. In order to identify the potential vulnerabilities of the financial sector to climate-related risks and the potential consequences of such vulnerabilities on transition objectives, the European Commission has also recently mandated the European Supervisory Authorities to work together with the ECB and the European Systemic Risk Board (ESRB) on a joint cross-sectoral climate stress test for the entire EU financial sector, the results of which are expected at the latest by the first quarter of 2025.

1.4. MiFID rules related to sustainability

ESMA identifies the suitability assessment as one of the most important investor protection requirements under MiFID.

From 2 August 2022, investment advisors and portfolio managers have been required to obtain specific information on their clients' sustainable investment preferences and to meet these preferences, in addition to their other investment objectives and taking into account their financial situation, knowledge and experience.

The "Guidelines on certain aspects of the MiFID II suitability requirements", as updated by ESMA to comply with these new obligations, will apply from 3 October 2023. The year 2023 will also see the implementation of ESMA's guidelines on product governance requirements under MiFID II, also updated to cover sustainability-related aspects.

2. The CSSF's role

The work undertaken in 2022, and that still to come, demonstrate that integrating sustainability and sustainability risks as key factors in financial strategies is a long-term goal.

2.1. Supervisory priorities

In order to best support the financial sector in this ambition, the CSSF identified and communicated on a number of supervisory priorities in the field of sustainable finance¹. These priorities are logically based on the fundamental elements of the regulatory framework and aim to support its coherent implementation, while considering its complexity.

The deep transformations faced by the supervised entities require the establishment of governance structures that are adapted to the current challenges. The integration of ESG risks and other sustainability-related factors into the strategies, governance arrangements and internal processes of supervised entities is essential not only to ensure the resilience of the financial sector to climate change and transition risks, but also to mitigate greenwashing risks.

In order to achieve its supervisory tasks, the CSSF will continue to integrate sustainability-related aspects in the range of supervisory tools at its disposal. The following must notably be highlighted:

- a review of compliance with Circular CSSF 21/773 on the management of climate-related and environmental risks for less significant banks and third-country branches;
- a data collection exercise for the asset management industry to cover both risk integration and disclosure requirements under the SFDR and Taxonomy Regulation;

¹ https://www.cssf.lu/en/2023/04/the-cssfs-supervisory-prioritiesin-the-area-of-sustainable-finance/

- the targeted review of financial and non-financial disclosures by issuers for which significant climate-related risks have been identified;
- the inclusion of sustainability-related aspects in on-site inspections.

Details on the supervisory priorities and the way in which the CSSF's supervisory tools will be implemented are available on the CSSF's website or in the specific sections of the present annual report.

2.2. Upskilling, capacity building and financial education

To ensure a good understanding of the regulatory challenges and to respond adequately, it is crucial to make capacity building a priority, both for the CSSF and for the entities under its supervision.

In 2022, the CSSF continued to roll out its internal training program on ESG topics for its agents, with contents adapted to the different profiles. It also played its role in this field by making sustainable finance one of the central topics of its financial education program. The results of a survey conducted in 2022 showed that the subject of sustainable finance is a difficult topic to fully comprehend for the general public. An information campaign and a dedicated website (https://finance-durable.lu/fr/) were designed and launched at the beginning of 2023, with the aim of contributing to a better understanding of the subject, raising citizens' awareness and encouraging them to question the existing product offer.

The year 2022 has also brought to light some uncertainties, with diverging approaches at European level, and the CSSF is contributing to the work being done at European level to ensure the stabilisation of the regulatory framework and to overcome these inconsistencies.

2.3. Cooperation at international level

The CSSF contributes to the development and harmonisation of the requirements related to sustainable finance via its participation in the working groups of the European Commission and the European Supervisory Authorities, as well as in the international working groups such as the NGFS, the Basel Committee and IOSCO.

ESMA's Sustainability Coordination Network (SCN), established in 2019 to facilitate ESMA's cross-sectoral work on sustainable finance, has evolved into the Sustainability Standing Committee (SSC). This committee, actively supported by the CSSF, is responsible for cross-sectoral issues in this area (such as taxonomy and greenwashing), with the aim of promoting convergence between the national competent authorities of the EU.

Through these groups, the CSSF was involved in the work on prudential requirements for credit institutions, investment firms and asset managers, followed the evolution of the CSRD and the development of ESRS standards, and will continue to follow the work on the EU Green Bond Standard, the development of an eco-label or the integration of ESG factors by rating agencies, among other legislative actions foreseen in the European Commission's renewed strategy on sustainable finance.

The CSSF also cooperates with other competent authorities in order to share supervisory experiences and practices in the fight against greenwashing. A better understanding of the greenwashing phenomenon in order to contain it and ensure harmonised monitoring within the EU is a key step towards creating a trustworthy environment for all stakeholders.

VII. Supervision of banks



1. Banking supervision practice

1.1. Organisation of the supervision

The responsibility for the microprudential supervision in the strict sense depends on the typology of credit institutions, as illustrated in the table below.

Competent authorities by type of credit institutions active in Luxembourg

Type of credit	Competent	Num	per
institution	authority		2022
Significant institutions incorporated under Luxembourg law	ECB	30	27
Less significant institutions incorporated under Luxembourg law	CSSF	51	51
Branches of a significant institution	ECB	20	19
Branches of a less significant institution	Supervisory authority of the head office	8	9
Branches of an institution headquartered in an EU Member State outside of the SSM	Supervisory authority of the head office	2	2
Branches of a non-EU institution	CSSF	13	13
Total		124	121

Prudential supervision in the strict sense includes the supervision of solvency, liquidity and internal governance. It does not include the other areas of supervision that fall under the sole competence of the CSSF, namely:

- the supervision of compliance with the professional obligations regarding anti-money laundering and combating the financing of terrorism (AML/CFT);
- the supervision of regulations for consumer protection: MiFID, laws on mortgage credits and consumer credits;
- the supervision of regulations relating to market integrity: European Market Infrastructure Regulation (EMIR), Securities Financing Transactions Regulation (SFTR), Benchmark Regulation (BMR) and covered bonds directive;
- the supervision of the obligations deriving from sectoral laws on UCIs, including, in particular, the obligations related to the function of depositary bank of UCIs;

 the supervision of obligations deriving from other European or national regulations, like PSD2, Directive NIS¹ and the law on payment accounts.

At the end of 2022, 129.45 full-time equivalents (FTE) (2021: 125.85) contributed to the various tasks in relation to the execution of the CSSF's banking supervision mandate.

Agents in charge of authorisations and validation and supervision of internal models for credit risk mostly perform tasks under the responsibility of the ECB.

As regards the areas of supervision referred to above, the CSSF agents also participate actively in working groups which meet at European and international level.

1.2. Priorities with respect to prudential supervision and banking risks

The CSSF sets its priorities for the supervision of credit institutions falling within its remit on an annual basis. In order to use resources as efficiently as possible, the determination of the supervisory priorities follows a risk-based approach considering the main risks and major vulnerabilities of the Luxembourg banking centre, as well as the supervisory priorities defined by the ECB and the EBA.

The priorities of the CSSF for the prudential supervision in 2022 were the following.

1.2.1. Credit risk

The economic slowdown, together with the increase in inflation and interest rates, tends to reduce the debt servicing capacity of households and undertakings. Thus, the CSSF continued to closely monitor the development of the banks' credit risk arising therefrom. Throughout the year 2022, the level of non-performing loans and the banks' exposure to credit risk remained limited. The rise in provisions of banks in 2022 with respect to credit risk concerned mainly Russian exposures impacted by the war in Ukraine and non-performing consumer credits outside of Luxembourg.

1.2.2. Conduct risk, including money laundering and terrorist financing

Money laundering and terrorist financing (ML/TF) are risks inherent in the activities of international financial centres such as Luxembourg. In banks, wealth management activities involving international customers are particularly exposed to them. Within the CSSF, the control of these risks has undergone significant developments over the last years with, in particular, a substantial increase in the number of staff and systems allowing an efficient fight against ML/TF. These developments continued in 2022 in a context of prevention (via targeted communications) as well as control (via the execution of yearly AML/CFT control plans - both off-site and on-site). Like in previous years, in 2022, the outcome of these controls resulted in the CSSF imposing administrative fines on banks which did not comply with their AML/CFT-related professional obligations². The effectiveness of the CSSF's AML/CFT framework was assessed end of 2022 by the FATF and results should be available in June 2023.

1.2.3. Profitability risk

The profitability risk remains challenging for many banks in Luxembourg. This risk is exacerbated by the following factors: (i) a business volume lower than the critical mass, (ii) ongoing rise in operational costs linked particularly to compliance with regulatory requirements, and (iii) necessary investments in digitalisation projects. It is mitigated by the rise in interest rates which generally increases net interest income.

The profitability risk is greater in small banks which often do not have the critical mass to cover their costs. Thus, small banks have a cost-to-income ratio which is, on average, higher than that of big banks. In the future, it is probable that the number of credit institutions will continue to decrease and that non-profitable banks will leave the market or be absorbed by larger institutions. However, the means of action of the supervisor with respect to profitability risk are limited. The CSSF mainly ensures that low profitability does not lead to excessive risk-taking by banks which otherwise would jeopardise depositors.

¹ Directive (EU) 2016/1148 of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union

² For further details on this subject, please refer to point 2. of Chapter XVIII "Instruments of supervision".

1.2.4. Operational risk

The main activity of banks in wealth and asset management (depositary banks and private banks) is the custody and management of their customers' financial assets. The main risks linked to this type of banking activity are operational in nature and include, besides ML/TF risk and the other risks mentioned above, IT risk with cyber risks for instance, resilience risk (business continuity) and risks related to the use of sub-depositary institutions and outsourcing.

In 2022, the CSSF's priority supervisory actions with respect to operational risk to which the banks concerned are exposed were the same as in previous years.

1.2.5. Risks related to climate change and environmental degradation

Following the publication of Circular CSSF 21/773 on the management of climate-related and environmental risks in June 2021, the CSSF initiated its first dedicated supervisory activities in 2022. Hence, the CSSF requested a sample of 15 banks, among the less significant banks and branches of non-EU banks which it directly supervises, to carry out a self-assessment of compliance with Circular CSSF 21/773. The exercise aimed to outline the state of play of the level of the banking sector's alignment with the CSSF's expectations set out in Circular CSSF 21/773. The first presentation of the findings of the analysis is expected in 2023.

The CSSF's supervisory work in 2022 on sustainability also included an off-site review of the SFDR-related disclosures on the websites of a sample of banks which provide discretionary portfolio management services.

1.3. Supervision of significant institutions

At the end of 2022, 47 banks established in Luxembourg were directly supervised by the ECB, either because they fulfil the criteria to qualify as significant institution (SI) at solo or consolidated level, or because they were part of a group considered as significant. These banks represented 71% of the total assets of the Luxembourg banks.

Supervision of SIs is exercised by JSTs formed of staff members from the ECB and from the national competent authorities. At the end of 2022, the CSSF was a member of 24 JSTs for as many banking groups. Twenty-three CSSF supervisors were directly involved in this supervisory system.

SIs established in Luxembourg by category

SSM status	Number of banks	In % of assets
Significant banks, group head in Luxembourg	4	12.5%
Significant banks, subsidiaries of an SI	23	30.4%
Branches of an SI	19	28.1%
Sub-total SIs	47	71.0%
Total Luxembourg banking sector	121	100.0%

The SSM's supervisory approach is described in detail in the *Guide to banking supervision*³.

1.4. Supervisory review and evaluation process (SREP)

Since 2015, a common SREP methodology has been applied to less significant institutions (LSIs). It is based on the EBA guidelines on SREP (EBA/GL/2018/03) and on the methodology applied to SIs by the ECB.

³ www.bankingsupervision.europa.eu/ecb/ pub/pdf/ssmguidebankingsupervision201411. en.pdf?404fd6cb61dbde0095c8722d5aff29cd. In this regard, see also the annual reports of the ECB published under www.ecb.europa.eu/pub/annual/html/index.en.html.

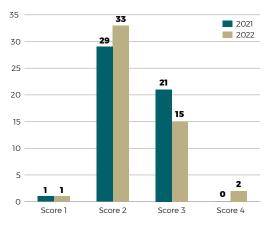
In general, the SREP is carried out annually based on a large range of quantitative and qualitative information sources, among which the prudential reporting and internal reports provided by the bank, the reports of on-site inspections, the ICAAP⁴ and the ILAAP⁵ as well as the different stress tests. The SREP is applied, in a proportionate manner, to credit institutions having regard to the nature, scale and complexity of their activities and risks and, if relevant, their situation within the group.

The interest rate risk in the banking book and the impact of the increasing interest rates on the LSIs' profitability and risk-bearing capacity were subject to an assessment within the SREP in 2022. This risk has further developed during 2022 following several rate hikes by the ECB and led also to specific monitoring measures.

In parallel, following the accelerated digitalisation of banking services caused by the COVID-19 pandemic, the general increase of ICT risks was accompanied by a high level of attention to the ongoing assessment of and awareness-raising on IT risks.

The distribution of overall SREP scores, which vary on a scale of 1 (low risk for the viability of the institution) to 4 (high risk for the viability of the institution), remained broadly stable from 2021 to 2022 with an average of 2.35 for all LSIs.

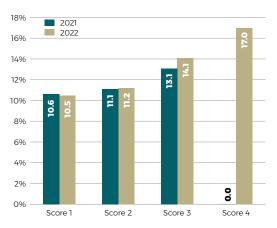




Based on the conclusions of the SREP, the LSIs were required to implement a range of qualitative and quantitative measures, mainly in relation to capital ratios.

The applicable own funds requirements under the CRR should appropriately cover the incurred risks, including in stressed conditions. Where the results of the stress tests indicate that an institution's capital position would become vulnerable or even non-compliant with the relevant rules, the CSSF requires additional own funds in the form of Pillar 2 Guidance (P2G) to ensure that the institution remains appropriately capitalised.

Own funds requirements (P1+P2R+buffers+P2C) in % by SREP score



As regards all LSIs, on average, Pillar 1 (P1) and Pillar 2 (P2R) capital requirements, combined capital buffers and the P2G cumulatively amounted to 12.25% (11.91% in 2021).

In addition to the interventions aiming at the adequacy of the amount of capital, the CSSF took some qualitative supervisory measures in 2022. As in the past, these measures mostly focussed on strategic planning by requiring, for example, restrictions for certain activities, a better management of liquidity risk and/or the strengthening of the internal governance framework or of the AML/CFT framework.

4 Internal Capital Adequacy Assessment Process

5 Internal Liquidity Adequacy Assessment Process

1.5. Authorisations

The CSSF mainly intervenes in four banking-related authorisation processes.

1.5.1. Authorisation of new credit institutions

Since the introduction of the SSM, the ECB is exclusively competent for the authorisation of new credit institutions in all SSM countries. The competence for the authorisation of branches of non-EU credit institutions remains at national level.

However, the CSSF is still the entry point for the submission of all the authorisation files. Upon receipt of an application, the CSSF analyses it in order to verify compliance with the legal and regulatory requirements, focussing in particular on compliance with the AML/CFT legislation. In the case of Luxembourg credit institutions, the CSSF drafts a proposal, after the examination of the file, and submits it for decision to the ECB. As regards branches of non-EU credit institutions, the authorisation is granted by the CSSF.

In 2022, the CSSF worked on two authorisation requests for new credit institutions. One authorisation was granted by the ECB. The examination of the other file continues in 2023.

1.5.2. Authorisation for acquisitions of qualifying holdings

Like the authorisation of a new institution which requires prior examination of the file by the CSSF, the subsequent acquisitions of shareholdings that reach or exceed 10%, 20%, 33 1/3% or 50% of the capital or that give significant influence over the institution concerned (qualifying holding) are also examined by the CSSF and authorised by the ECB in accordance with the applicable legal and regulatory requirements.

In 2022, the CSSF examined 16 qualifying holding files, nine of which led to an authorisation by the ECB during the year. One file was withdrawn during the examination and the examination of the other files continues in 2023.

1.5.3. Authorisation of directors and managers of banks

In 2022, the CSSF dealt with 138 applications for nomination of new directors and authorised managers in Luxembourg credit institutions. The CSSF verifies the compliance of the candidates, notably in terms of good repute, professional experience and availability, with legal and regulatory requirements. Particular attention is given to compliance with the AML/CFT legislation. Following the examination of the files by the CSSF, the nominations in SIs are forwarded to the ECB for authorisation, whereas the nominations in LSIs and third-country branches are directly authorised by the CSSF.

1.5.4. Authorisation of financial holding companies

For financial holding companies subject to a procedure for approval or for exemption from approval under the CRD framework, the procedures implemented by the CSSF aim to clarify the role and responsibilities of these parent undertakings in accordance with the consolidated prudential requirements. Depending on the situation, the CSSF examines these files jointly with another competent authority.

In 2022, the CSSF, as consolidating supervisor, processed two requests for exemption from approval, both of which have been approved. The CSSF, as competent authority of the Member State where the financial holding company is incorporated, also participated in joint decision-making with the competent authority for the consolidated supervision with respect to five requests for exemption from approval, among which one file was approved and four files continue to be processed in 2023.

1.6. Depositary banks of Luxembourg-domiciled UCIs

The UCITS V Directive and the AIFMD, together with their delegated acts, reinforce the regulatory framework of the depositary function for UCITS and AIFs. The CSSF's supervision aims to verify that the depositaries continuously observe all legal and regulatory provisions relating to their depositary function. As at 31 December 2022, 47 banks have the administrative authorisation to act as a depositary bank of Luxembourg-domiciled UCIs. Prior to starting any depositary activities for Luxembourg-domiciled UCIs, an administrative authorisation has indeed to be obtained from the CSSF. Any major subsequent change of the elements underlying the initial approval as a UCI depositary (e.g. extension of initial approval to other investment vehicles and/or any major change in the operational model) is also subject to the CSSF's approval. The CSSF processed one new administrative authorisation to act as UCI depositary bank in 2022.

1.7. MiFID II

The supervision of the credit institutions' compliance with MiFID II regulations is based on:

- the annual report of compliance to be issued by the external réviseur (auditor), namely the long form report covering, among others, the professional obligations regarding the conduct of business rules and the arrangements concerning the protection of customer assets;
- the different reports issued by the internal control functions;
- the on-site inspections performed by the CSSF's teams on MiFID II legislation in general as well as on specific topics. During 2022, seven on-site inspections were carried out.

Furthermore, a certain number of questionnaires were sent to credit institutions, mostly at ESMA's request, as regards, for example, the application of ex-post MiFID II costs and charges disclosure rules to retail clients or the cross-border provision of MiFID II investment services and activities to retail clients.

Therefore, it is also important to remind that the CSSF works in close collaboration with ESMA and other national supervisory authorities in order to promote a harmonised supervisory framework, focussed on the protection of investors in general and of retail investors in particular.

1.8. EMIR

The European Market Infrastructure Regulation (EU) No 648/2012 (EMIR) of 4 July 2012 on OTC derivatives, central counterparties and trade repositories, as amended by Regulation (EU) 2019/834 (EMIR Refit) in 2019, aims to improve the transparency of over-the-counter derivative markets and to reduce the risks associated with these markets.

The objective of the CSSF's work is to continually improve the accuracy, precision and reliability of the reported transactions via a data analysis module. In 2022, the CSSF sent one injunction letter and intervened six times in writing in order to ask for remediation of identified deficiencies at banks established in Luxembourg. In addition, based on the risk-based approach, three on-site inspections were conducted in order to ensure compliance with the regulatory requirements under EMIR.

1.9. Payment services

Under Directive (EU) 2015/2366 of 25 November 2015 on payment services (PSD2), transposed into national law by the Law of 20 July 2018 amending the Law of 10 November 2009 on payment services, the following reports, submitted by credit institutions in their capacity as payment service provider (PSP), were analysed in 2022:

- monthly statistical data on fraud relating to different payment means which are collected by the BCL based on the operational collaboration between the BCL and the CSSF;
- annual updated and comprehensive assessment of the ICT and security risks relating to payment services;
- 138 notifications in connection with 45 major operational or security incidents which were shared by the CSSF with the EBA and the BCL.

The CSSF carried out checks on the websites of credit institutions to find out whether they publish, where applicable, the quarterly statistics on the availability and performance of the dedicated interface and of the interface(s) used by their payment service users according to Article 32(4) of the Regulatory Technical Standards on strong customer authentication and common and secure open standards of communication (RTS on SCA&CSC). Furthermore, the CSSF asserted its right to information under Article 3(3) (review of the security measures) of the RTS on SCA&CSC to obtain an audit summary report on the compliance of the security measures with the requirements set out in the RTS on SCA&CSC. This exercise concerned a selection of credit institutions according to a risk-based approach.

Finally, via Circular CSSF 22/828 amending paragraph 4. "Additional requirement for payment service providers (PSPs)" of Circular CSSF 20/750, the CSSF introduced a standardised form (PSP ICT Assessment) regarding an assessment of ICT and security risks related to payment services provided by PSPs. The objective of this standardised form is to give guidance to the PSPs on the CSSF's expectations of the information to be provided via the PSP ICT Assessment, and hence achieve a certain level of harmonisation and comparability among the PSPs' ICT Assessments.

1.10. Recovery plans

Directive 2014/59/EU of 15 May 2014 (BRRD) and Directive (EU) 2019/879 of 20 May 2019 (BRRD2) establishing a framework for the recovery and resolution of credit institutions and investment firms provide the authorities with instruments which should allow them to deal with failing national or transnational banks and, thus, to limit their systemic impact.

Among the arrangements implemented by both the BRRD and BRRD2, transposed by the Law of 18 December 2015 and the Law of 20 May 2021 respectively, is the obligation to establish a recovery plan indicating notably the measures planned by an institution to restore its viability following a financial deterioration.

In 2022, the CSSF analysed the comprehensiveness, quality and credibility of 27 recovery plans for which it is the direct supervisory authority. Ten of these plans were subject to simplified obligations for banks fulfilling certain criteria. Furthermore, for banks submitting an annual recovery plan, the CSSF organised submission meetings in order for them to present their plan.

For Luxembourg banks belonging to European groups, the CSSF participated, in its capacity as host authority, in several joint decisions on group recovery plans involving less significant institutions within the meaning of the SSM. It also contributed to the assessment of recovery plans of some banks under the direct responsibility of the ECB. Finally, it took part in several Crisis Management Group meetings organised by home authorities of systemically important banking groups having a material entity in Luxembourg.

1.11. Benchmarks

Regulation (EU) 2016/1011 of 8 June 2016 (Benchmark Regulation - BMR) defines a common framework to ensure the accuracy and integrity of the indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds in the EU. The Law of 17 April 2018 has designated the CSSF as the Luxembourg competent authority to ensure compliance with the BMR by the supervised entities governed by this regulation.

The CSSF is in charge of supervising the contributing banks and the LSIs which are using benchmarks. With regard to users, the CSSF contributed to analyses on the remaining LIBOR transition issues published by the Financial Stability Board (FSB) and the Basel Committee.

As far as the single local bank acting as contributor is concerned, the role taken by this bank also requires the CSSF to participate in the Euribor college which consists of all national competent authorities of banks contributing to Euribor.

1.12. Cooperation in banking supervision

In 2022, the CSSF organised one supervisory college concerning a bank for which it exercised the ultimate consolidated supervision at European level.

As a large number of banking groups is present in the Luxembourg financial sector through subsidiaries, the CSSF regularly participates, as host supervisor, in colleges, including colleges organised by supervisory authorities from non-EEA countries. In addition to the colleges, periodical bilateral meetings take place between the CSSF and the Swiss supervisory authority, the FINMA. Cooperation with the Chinese and US authorities is mainly done via the participation in supervisory colleges organised by these authorities. It should be borne in mind that, with the start of the SSM, a number of supervisory colleges are now internalised. Indeed, for Luxembourg subsidiaries and branches belonging to banking groups with their group head in another Member State participating in the SSM, the coordination between authorities takes place through JSTs.

One of the main objectives of the colleges is the performance of a Joint Risk Assessment based on which the colleges assess the capital adequacy of the banking groups and their subsidiaries with regard to the incurred risks, as well as their liquidity situation. Following this assessment, they take a Joint Decision on Capital and Liquidity (for EEA colleges) which is communicated to the banking groups and their subsidiaries. Moreover, the purpose of the colleges is to promote the exchange of information between authorities, including information on the situation of ML/TF compliance risks.

In accordance with the AML/CFT College Guidelines of the EBA, the CSSF organised nine colleges as home authority and participated, as host authority, in 29 colleges organised by supervisory authorities of other EU Member States in 2022.

The CSSF also closely collaborates with the foreign supervisory authorities within the context of the consultations provided for by the European directives and in all circumstances in which cooperation is needed.

Finally, the CSSF cooperates with the national judicial and law enforcement authorities as well as with the Commissariat aux Assurances in accordance with Article 2 of the Law of 23 December 1998 establishing a financial sector supervisory commission (Commission de surveillance du secteur financier) and Articles 9-1 and 9-1a of the Law of 12 November 2004 on the fight against money laundering and terrorist financing. Moreover, the CSSF consults the intelligence unit in the context of the procedures for authorisation and qualifying holdings, if deemed necessary.

1.13. Stress testing

Stress tests are exercises aiming to identify sources of risks and vulnerabilities which banks may face and to determine their impact on banks.

The CSSF is involved in stress tests at three levels:

- At EU level, the CSSF assists the EBA in the development of the methodology of its EU-wide stress test relating to solvency which is carried out every two years.
- At SSM level, the CSSF assists the ECB in its annual stress test exercise, in the development of a methodology and during the performance of the stress test. In 2022, the ECB carried out, for the first time, a climate risk stress test of all the significant banks within the SSM. It also carried out an assessment of the euro area banking sector's resilience to adverse macroeconomic scenarios in the light of the Russian invasion of Ukraine. The CSSF provided its technical expertise in relation to the four SIs having their group head in Luxembourg.
- At national level, the CSSF carries out solvency tests and other stress tests or sensitivity analyses on an annual or half-yearly basis. The aggregated results of these analyses are regularly presented to international organisations such as the IMF or the OECD which frequently request the CSSF's point of view on the stability of the Luxembourg banking sector.

The results of the solvency tests are a source of information to (i) compare, judge and, where appropriate, challenge the results of the stress tests carried out internally by banks in the framework of their ICAAP, (ii) help assess the solvency risk of the institutions, and (iii) help assess the situation and future capital requirements of a bank as a preventive approach. The results of the stress tests form a starting point for the determination of the LSIs' capital levels under Pillar 2 (Pillar 2 Guidance – P2G).

1.14. Intra-group credit risks

One of the main risks monitored by the CSSF is related to the significant exposures of Luxembourg banks to banking entities of their group.

The Luxembourg banking sector is primarily composed of subsidiaries and branches of large international banking groups which carry out activities of private banking and/or custody of financial assets in Luxembourg. These activities generate excess liquidity which is either maintained in Luxembourg as liquidity buffer (often deposited with the BCL) or lent to the parent company.

In total, intra-group exposures represented 32% of the assets of the Luxembourg banking sector at the end of 2022. In line with the European rules in this regard and Article 56-1 of the Law of 5 April 1993 on the financial sector, these exposures often represent a multiple of a bank's own funds. In these cases, the CSSF follows and controls compliance by the banks with the legal conditions provided for in the above-mentioned Article 56-1.

1.15. Revision of the long form report

Over the past years, the legal, regulatory and prudential provisions to which the supervised entities are subject have been reinforced. In this context, the CSSF wanted to put in place new supervisory tools and revised the long form report introduced in 2001 by Circular CSSF 01/27.

The objectives of this revision are to improve the risk-based supervision, harmonise the approach across supervised entities and build a dynamic supervisory framework which is adaptable to regulatory developments. The revision of the long form report is also part of the CSSF 4.0 strategy. The long form report is now digital, thus making the process more efficient for entities, enhancing transparency and facilitating data harnessing. The revised long form report was introduced by Circular CSSF 22/821. Published on 25 October 2022, this circular, which applies to credit institutions and branches of non-EU credit institutions and repeals Circular CSSF 01/27, introduces the following deliverables:

- a self-assessment questionnaire (SAQ) to be filled in by in-scope entities and which consists of the following modules: internal governance, IT risk, credit risk, large exposures, related parties, foreign branches, MiFID, PSD2, depositary bank and consolidation aspects;
- agreed upon procedure (AUP) report(s) to be established by the réviseur d'entreprises agréé (approved statutory auditor - REA). In 2023, these AUP reports, established by the REA based on the figures as at 31 December 2022, will cover the MiFID and PSD2 modules;
- a separate report on the protection of financial instruments and funds belonging to clients as required under Article 7 of Grand-ducal Regulation of 30 May 2018 and to be established by the REA;
- a separate report covering AML/CFT further to CSSF Regulation No 12-02 to be established by the REA.

On 23 December 2022, the CSSF also published Circular CSSF 22/826 which incorporates the provisions of Circular CSSF 01/27 on the scope of the statutory audit mandate as well as on the content of the audit reports to be established in this context.

For branches of EU credit institutions, the revision of the long form report in accordance with the amended requirements of Circular CSSF 07/325 introduces the submission of an annual SAQ on the MiFID, PSD2 and depositary bank topics.

2. Developments in the banking sector in 2022

2.1. Development in the number of credit institutions

With 121 entities authorised at the end of the financial year 2022, the number of banks decreased by three entities as compared to 31 December 2021.

Three banks started their activities in 2022.

Denomination	Start date of the activity	Type of activities
J.P. Morgan SE, Luxembourg Branch	22 January 2022	Custodian banking
DONNER & REUSCHEL AG, Zweigniederlassung Luxemburg	1 July 2022	Custodian banking
Clearstream Fund Centre S.A.	30 December 2022	Fund services

Six banks were deregistered from the official list during 2022.

Denomination	Date of deregistration	Reason
Banque Puilaetco Dewaay Luxembourg S.A.	1 January 2022	Merger with Quintet Private Bank (Europe) S.A.
J.P. Morgan Bank Luxembourg S.A.	22 January 2022	Merger with J.P. Morgan S.E. (Germany)
Keytrade Bank Luxembourg S.A.	29 April 2022	Merger with Swissquote Bank Europe S.A.
RCB Bank Ltd, Luxembourg branch	29 July 2022	Cessation of activities
BNP Paribas Securities Services, succursale de Luxembourg	1 October 2022	Merger with BNP Paribas, succursale de Luxembourg
Danske Bank International S.A.	22 November 2022	Cessation of activities

2.2. Development in banking employment

As at 31 December 2022, the number of employees in Luxembourg credit institutions⁶ amounted to 26,012 compared to 25,966 as at 31 December 2021, representing an increase of 46 people on an annual basis. In 52% of banks, employment increased whereas in 36% of them it decreased.

Compared to the figures of end December 2021, the distribution of employment according to men and women remained almost unchanged with 55% men and 45% women.

2.3. Development of balance sheet and off-balance sheet items

The 3.16% decrease of the total balance sheet which fell to EUR 923.0 billion had its origin in the decline of the deposits from investment funds and from intra-group entities in the liabilities of the balance sheet. As regards the asset side of the balance sheet, this decrease impacted loans and advances to central banks which dropped by 18.25%.

ASSETS	2021	2022 ⁸	Variation
Loans and advances to central banks	200,913	164,241	-18.25%
Loans and advances to central governments	3,096	3,599	16.22%
Loans and advances to credit institutions	334,634	338,002	1.01%
Loans and advances to customers	254,623	259,183	1.79%
Fixed-income transferable securities	129,642	119,104	-8.13%
Variable-yield transferable securities	7,619	7,082	-7.05%
Fixed assets and other assets	22,594	31,819	40.83%
Total	953,122	923,030	-3.16%
LIABILITIES	2021	2022 ⁹	Variation
	2021		Variation
Amounts owed to central banks	15,899	9,086	-42.85%
Amounts owed to credit institutions	291,979	273,446	-6.35%
Amounts owed to customers	495,079	105 500	
	())) ()	487,528	-1.53%
Amounts owed represented by securities	59,998	57,409	-1.53% -4.32%
represented by			
represented by securities Liabilities (other than deposits) held for	59,998	57,409	-4.32%
represented by securities Liabilities (other than deposits) held for trading	59,998 6,062	57,409 8,776	-4.32% 44.77%
represented by securities Liabilities (other than deposits) held for trading Provisions	59,998 6,062 3,055	57,409 8,776 3,098	-4.32% 44.77% 1.40%
represented by securities Liabilities (other than deposits) held for trading Provisions Subordinated liabilities	59,998 6,062 3,055 3,886	57,409 8,776 3,098 4,793	-4.32% 44.77% 1.40% 23.35%

Aggregate balance sheet total - in million EUR⁷

As regards off-balance sheet exposures, the Luxembourg banking sector had granted loan commitments and financial guarantees amounting to EUR 168.1 billion as at 31 December 2022 (+0.73% over a year).

2.4. Development in the profit and loss account

In 2022, the 39.0% increase in net interest income over a year greatly contributed to the 21.8% rise in profit before provisions and taxes which reached EUR 6,205 million. Due to the surge in provisions, net profit for the year 2022 only increased by 2.0% compared to 2021 and amounted to EUR 4,101 million. It should be noted that 77% of the banks ended the year 2022 with a positive net result (82% in 2021).

The increase in net interest income was shared by 68% of the credit institutions and was mainly due to the rise in the key interest rates by the ECB during the second half of 2022.

Net fee and commission income remained stable, whereas other net income, which includes valuation losses linked to the hedging portfolio and securities portfolio as well as other volatile and non-recurring items, decreased by 26.3%.

General expenses (+3.4%) continued their rising trend in most banks. This upward movement was echoed at the level of other general expenses (+4.2%) as well as of staff costs (+2.2%).

The increase of provisions in 2022 concerned mainly Russian exposures impacted by the conflict in Ukraine, expected provisions under the IFRS 9 accounting framework in the context of economic slowdown and non-performing exposures of assets outside Luxembourg.

The cost-to-income ratio improved year-on-year and reached 56% on average. This average conceals significant disparities between banks. Indeed, as at 31 December 2022, 23 out of 120 banks recorded a cost-to-income ratio higher than 100%.

⁷ Figures at the lowest level of consolidation available

⁸ Preliminary figures

⁹ Preliminary figures

Development in the profit and loss account - in million ${\rm EUR}^{10}$

	2021	Relative	2022 ¹¹	Relative	Variat	ion
	2021	share	2022	share	in volume	in %
Net interest income	4,891	38%	6,798	48%	1,907	39.0%
Net fee and commission income	5,943	47%	5,905	42%	-38	-0.6%
Other net income	1,899	15%	1,399	10%	-500	-26.3%
Banking income	12,733	100%	14,102	100%	1,369	10.7%
General expenses	7,637	60%	7,896	56%	260	3.4%
of which: staff costs	3,165	25%	3,236	23%	71	2.2%
of which: general administrative expenses	4,472	35%	4,661	33%	189	4.2%
Result before provisions	5,097	40%	6,205	44%	1,109	21.8%
Net creation of provisions	257	2%	1,288	9%	1,031	401.8%
Taxes	819	6%	817	6%	-2	-0.2%
Net result for the year	4,021	32%	4,101	29%	80	2.0%

Long-term development of profit and loss account - in million ${\sf EUR}^{12}$

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 ¹³
Net interest income	4,761	4,960	4,671	4,281	4,066	4,496	4,717	4,886	4,994	5,384	5,061	4,891	6,798
Net fee and commission income	3,587	3,832	3,727	3,962	4,101	4,720	4,602	4,706	4,975	5,132	5,038	5,943	5,905
Other net income	1,201	76	1,401	2,213	2,217	2,262	3,038	2,166	1,841	1,550	1,401	1,899	1,399
Banking income	9,549	8,868	9,799	10,456	10,384	11,478	12,357	11,758	11,809	12,067	11,501	12,733	14,102
General expenses	4,609	4,789	4,994	5,198	5,005	5,942	6,040	6,253	6,737	7,285	6,893	7,637	7,896
of which: staff costs	2,497	2,535	2,622	2,745	2,624	3,065	3,109	3,161	3,265	3,545	3,016	3,165	3,236
of which: general administrative expenses	2,112	2,253	2,372	2,453	2,381	2,878	2,931	3,092	3,473	3,740	3,876	4,472	4,661
Result before provisions	4,940	4,080	4,805	5,258	5,379	5,535	6,317	5,505	5,071	4,782	4,608	5,097	6,205
Net creation of provisions	498	1,572	765	865	327	577	757	956	712	441	922	257	1,288
Taxes	625	18	503	762	799	85	820	827	714	637	595	819	817
Net result for the year	3,817	2,490	3,538	3,631	4,253	4,874	4,740	3,721	3,645	3,703	3,091	4,021	4,101

10 Figures at the lowest level of consolidation available

11 Preliminary figures

12 Figures at the lowest level of consolidation available. Since 2021, the scope of the data of the Luxembourg banking sector has been based on the banks active at the reference period, excluding their foreign branches and their subsidiaries, in order to better represent the level of national activity. Consequently, the December 2020 figures have been restated to take account of the change of scope.

13 Preliminary figures

2.5. Solvency and liquidity ratios

The banks of the Luxembourg financial centre continued to register high prudential ratios. Even if the average capital ratio total of the banking sector declined from 24.25% to 23.06% during 2022, it remained largely over the regulatory threshold (except for variable buffers) set at 10.5%.

Elements of own funds¹⁴

	20	21	2022		
	Amount (in million EUR)	Relative share	Amount (in million EUR)	Relative share	
Own funds	56,811.7	100.0%	50,229.0	100.0%	
Common Equity Tier 1 capital (CETI)	50,275.2	88.5%	46,948.2	93.5%	
Additional Tier 1 capital (ATI)	1,622.7	2.9%	1,529.9	3.0%	
Tier 2 capital (T2)	4,913.8	8.6%	1,750.9	3.5%	

Risk-weighted exposure amounts

	20	21	2022		
	Amount (in million EUR)	Relative share	Amount (in million EUR)	Relative share	
Total risk exposure amount	234,287.5	100.0%	217,805.4	100.0%	
Risk-weighted exposure amounts for credit risk, counterparty risk and dilution risk and free deliveries	207,964.7	88.8%	193,566.0	88.9%	
of which: Standardised Approach (STA)	150,956.5	64.4%	142,338.9	65.4%	
of which: Internal ratings-based approach (IRB)	53,394.4	22.8%	47,670.4	21.9%	
Risk-weighted exposure amounts for operational risk	21,103.5	9.0%	20,035.6	9.2%	
Capital ratio	24.2	25%	23.0	6%	
Common Equity Tier 1 capital ratio (CET1 ratio)	21	21.46%		56%	

• Liquidity Coverage Requirement (LCR)

As at 31 December 2022, the weighted average of the LCR of Luxembourg banks and Luxembourg branches of banks having their registered office outside the EU amounted to 200% as compared to 214% at the end of December 2021. The minimum regulatory threshold is set at 100%.

At aggregate level, there was a significant concentration of the liquid asset buffer within Level 1 assets. The short-term deposits made with the BCL still represented the major part of Luxembourg banks' liquid assets.

• Net Stable Funding Ratio (NSFR)

The weighted average of the NSFR of Luxembourg banks and Luxembourg branches of banks having their registered office outside the EU amounted to 156% as at 31 December 2022, as compared to 176% at the end of December 2021. The minimum regulatory threshold is set at 100%.

Asset encumbrance ratio

Luxembourg banks have a low asset encumbrance ratio. As at 31 December 2022, this ratio amounted to 6.65% (7.91% in 2021) on weighted and aggregate basis, showing that most of the Luxembourg banks' assets were unencumbered. Only 10 banks had an asset encumbrance ratio exceeding 15% due to their business model. This was especially the case of banks issuing covered bonds. As a consequence, these banks were subject to additional reporting requirements.

VIII. Supervision of PFS



1. Investment firms

1.1. Development of investment firms in 2022

1.1.1. Development in the number of investment firms

During the year 2022, the number of investment firms decreased to 95 entities as at 31 December 2022 (against 101 entities at the end of 2021), among which 88 Luxembourg entities and seven branches of investment firms from other EU Member States (hereinafter "EU branches").

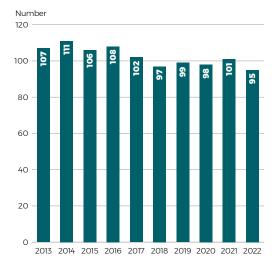
No entity was authorised as investment firm in 2022, against six new entities in 2021. One EU branch was established in Luxembourg in the course of the year.

Seven entities gave up their investment firm status during the year (three in 2021) for the following reasons:

- cessation of regulated activities (two entities);
- change into specialised PFS (one entity);

- voluntary liquidation (two entities);
- merger by acquisition (two entities).

Development in the number of investment firms



Among investment firms, portfolio management was the most widespread activity with 78 entities authorised as at 31 December 2022 to provide this investment service referred to in Annex II, Section A, point (4) of the Law of 5 April 1993 on the financial sector (against 83 entities at the end of 2021). In terms of IFD/IFR classification¹, about a third of the 88 Luxembourg investment firms registered on the official list as at 31 December 2022 were "class 2" investment firms while the rest of the population were "class 3" investment firms. No "class 1" investment firm has been identified.

1.1.2. Development in employment

Despite the deregistration from the official list of seven investment firms in 2022, employment continued its upward trend similarly to the previous years. The total number of staff of investment firms increased from 1,903 people as at 31 December 2021 to 1,958 people at the end of December 2022.

Employment in investment firms

Year	Number of investment firms	Total staff
2013	107	2,560
2014	111	2,390
2015	106	2,278
2016	108	2,285
2017	102	2,271
2018	97	2,115
2019	99	1,688
2020	98	1,776
2021	101	1,903
2022	95	1,958

It should also be noted that, as at 31 December 2022, about half the investment firms were very small insofar as they had 10 or fewer employees.

1.1.3. Development of balance sheets and net results

The provisional balance sheet total of all investment firms established in Luxembourg amounted to EUR 974 million² as at 31 December 2022, against EUR 1,063 million as at 31 December 2021, i.e. a decrease of 8.3%. This decrease is mainly due to investment firms that were deregistered from the official list in 2022 as well as to the decline in the balance sheets of some players, thus counteracting the increase in the balance sheets of several other players.

Investment firms also recorded a negative development in their net results over a year. Indeed, provisional net results amounted to EUR 77.2 million³ as at 31 December 2022, against EUR 115.6 million as at 31 December 2021, representing a fall by 33.22%. This fall was partly linked to the deregistration from the list of some investment firms in 2022 and also to the development of the financial markets that led to a decline in assets under management and net fee and commission income for a certain number of investment firms. This negative impact could not be offset by the increase in net results reported by other players. It should be noted that 65% of the investment firms ended the year 2022 with a positive net result (71% in 2021).

Development of the balance sheet total and of the net results of investment firms

(in million EUR)	2021	2022	Variation en %
Balance sheet total	1,063	974	-8.3%
Net results	115.6	77.2	-33.22%

IFR: Regulation (EU) 2019/2033 of 27 November 2019 on the prudential requirements of investment firms and amending Regulations (EU) No 1093/2010, (EU) No 575/2013, (EU) No 600/2014 and (EU) No 806/2014

3 Same comment as in the above footnote no 2

IFD: Directive (EU) 2019/2034 of 27 November 2019 on the prudential supervision of investment firms and amending Directives 2002/87/EC, 2009/65/EC, 2011/61/EU, 2013/36/EU, 2014/59/EU and 2014/65/EU

² The branches established in Luxembourg by investment firms originating from other EU/EEA Member States and included, since 2009, in the total number of investment firms are not included in these figures.

1.2. Prudential supervisory practice

1.2.1. Compliance by investment firms with the quantitative standards

• Capital base

In accordance with Articles 24–1 to 24–9 of the Law of 5 April 1993 on the financial sector, authorisation as investment firm is subject to the production of evidence showing the existence of minimum capital base. This capital base⁴ consisting of subscribed and paid–up share capital, relevant share premiums, legally formed reserves and profits brought forward, after deduction of possible losses for the current financial year, must be permanently available to the investment firm and invested in its own interest.

Based on the financial data that investment firms are required to provide to the CSSF on a monthly basis, the CSSF verifies, in particular, ongoing compliance of investment firms with the minimal capital base conditions. In 2022, the CSSF intervened at two investment firms for non-compliance with the legal provisions relating to capital base. One entity has taken regularisation measures allowing it to be compliant again with the minimal capital base, whereas the other entity decided to go into voluntary liquidation.

Capital ratios

The entry into force, in 2021, of the IFD/IFR changed, among others, the requirements applicable to investment firms with respect to capital ratios pursuant to Article 56 of the Law of 5 April 1993 on the financial sector.

This new prudential regime defines the composition of own funds and the methods to calculate own funds requirements under Parts Two and Three of the IFR. Investment firms are required to comply with these requirements at all times and to notify the CSSF of any instance of non-compliance, where applicable.

4 In accordance with Article 20(5) of the Law of 5 April 1993 on the financial sector, subordinated borrowing or profits for the current year are not to be taken into account for the determination of the minimum capital base of a professional of the financial sector. In 2022, the CSSF intervened at five investment firms for non-compliance with the capital ratio and closely monitored the regularisation processes implemented by the investment firms in case of capital ratio deficiency.

Concentration risk

Since the entry into force of the IFD/IFR, investment firms have been subject to the provisions relating to concentration risk under Part Four of the IFR.

In 2022, the CSSF did not intervene at investment firms in the framework of the applicable regulations.

Liquidity requirements

Investment firms must have sufficient liquidity pursuant to Article 43 of Part Five of the IFR which introduced liquidity requirements. In accordance with this article, investment firms are required to hold a minimum of one third of their fixed overheads requirement of the previous financial year⁵ in liquid assets.

In 2022, the CSSF intervened at one investment firm for non-compliance with the liquidity requirements.

1.2.2. Introductory visits

Introductory visits are made on the premises of investment firms that recently received their authorisation and, where appropriate, of existing investment firms that received an authorisation to carry out a new activity in addition to existing authorisations. The purpose of these missions is to verify that the contemplated business plan is being followed and that the systems and infrastructures are correctly implemented. In 2022, the CSSF visited three investment firms.

1.2.3. Specific audits

Article 54(2) of the Law of 5 April 1993 on the financial sector states that the CSSF may request a *réviseur d'entreprises agréé* (approved statutory auditor) to carry out a specific audit at a financial professional in relation to one or more specific aspects of the activities and operations of the

⁵ Calculation in accordance with the provisions of Article 13(1) of the IFR

institution. The ensuing costs are to be borne by the professional concerned. The CSSF has formally made use of this right once in 2022.

2. Specialised PFS

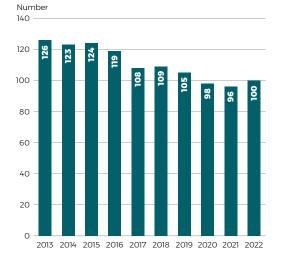
2.1. Development of specialised PFS in 2022

2.1.1. Development in the number of specialised PFS

During the year 2022, the number of specialised PFS increased and reached 100 entities (against 96 entities at the end of 2021).

In 2022, eight entities (six in 2021) were authorised as specialised PFS, including one entity that had been previously authorised as investment firm and one as support PFS. Four entities gave up their status of specialised PFS during the year, against eight in 2021.

Development in the number of specialised PFS



Among specialised PFS, the statuses of corporate domiciliation agent and professional providing company incorporation and management services are the most prevalent with 82 and 84 entities, respectively, authorised under these statuses as at 31 December 2022 (2021: 81 and 83 entities, respectively), followed by the status of registrar agent with 71 entities authorised at that date (2021: 67 entities).

2.1.2. Development in employment

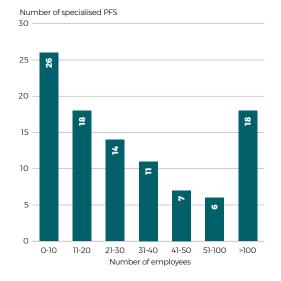
During 2022, the number of people employed by all specialised PFS rose by 903 to a total of 6,852 people, representing an increase of 15.1% as compared to the end of 2021.

Development in employment of specialised PFS

Year	Number of specialised PFS	Total staff
2013	126	3,201
2014	123	3,431
2015	124	3,787
2016	119	3,972
2017	108	4,008
2018	109	4,480
2019	105	5,183
2020	98	5,476
2021	96	5,949
2022	100	6,852

As at 31 December 2022, 18 specialised PFS employed over 100 people (against 16 entities at the end of 2021) and 26 specialised PFS employed 10 or fewer people (against 29 entities at the end of 2021).

Breakdown of the number of employees per specialised PFS



2.1.3. Development of balance sheets and net results

Over a one-year period, specialised PFS recorded an overall rise of EUR 66.04 million (+1.1%) in their balance sheet and of EUR 164.25 million (+180.5%) in their net result.

Development of the balance sheet total and of the net results of specialised PFS

(in million EUR)	2021	2022	Variation in %
Balance sheet total	6,172.45	6,238.49	+1.1%
Net results	90.98	255.23	+180.5%

2.2. Prudential supervisory practice

In the context of the prudential supervision of specialised PFS, the CSSF verifies compliance by specialised PFS with the quantitative and qualitative standards.

2.2.1. Capital base

In accordance with Article 20 and Articles 25 to 28-10 of the Law of 5 April 1993 on the financial sector, authorisation as specialised PFS is subject to the production of evidence showing the existence of minimum capital base for a PFS authorised as a legal person, or own assets for a PFS authorised as a natural person.

In 2022, the CSSF identified cases of non-compliance with the legal provisions in this respect at 12 entities (against six entities in 2021). Their situation was regularised in a satisfactory manner.

2.2.2. Compliance of the day-to-day management and corporate governance

In 2022, the CSSF intervened four times (thrice in 2021) by way of observation letters due to situations of non-compliance in the day-to-day management of specialised PFS, notably linked to insufficient presence and/or effective involvement of one of the two managers in the day-to-day management of the entity or to the need for reorganisation of the entity's administrative or management body composition.

3. Support PFS

3.1. Clarifications concerning Circular CSSF 22/806

In April 2022, the CSSF published Circular CSSF 22/806 on outsourcing arrangements in order to integrate the revised EBA Guidelines on outsourcing arrangements (EBA/GL/2019/02) into its administrative practice and regulatory approach. Moreover, the CSSF has decided to extend the scope of application to support PFS in order to promote convergence on a national level. Following some questions received from the market, the CSSF would like to clarify the following points.

Support PFS are subject to Circular CSSF 22/806 in two ways:

- on the one hand, as supervised entities which must comply with it where they rely themselves on service providers;
- on the other hand, as service providers of financial sector clients which must themselves comply with the requirements of the circular, whether these clients are based in Luxembourg or within the EEA if they fall within the scope of the revised EBA Guidelines on outsourcing arrangements included in the circular. Support PFS must therefore present their clients with agreements that include compulsory contractual clauses laid down in the circular.

As any entity falling within the scope of Circular CSSF 22/806, support PFS must comply with the process for prior notification to the CSSF in accordance with point 59 of the circular where they intend to outsource a critical or important function. However, there is an exception to this principle for support PFS or their branches authorised to operate IT systems and communication networks or to provide dematerialisation and/or conservation services (in accordance with Articles 29-3, 29-5 and/or 29-6 of the Law of 5 April 1993 on the financial sector). Where these support PFS or their branches intend to partially sub-outsource the management/operation of the systems for which they remain responsible vis-à-vis their financial sector clients, a prior authorisation of the CSSF and not a simple notification is still required in accordance with points 124 and 125 of the circular. The above also applies to management/resource operator services in a context of cloud computing (cf. point 141-c of the circular).

Following the publication of Circular CSSF 22/806, the question arose as to the benefit for a financial institution of using a support PFS if the main difference with outsourcing to a service provider located abroad simply consists in the two-month longer notification period.

The CSSF considers that where a supervised entity conducts due diligence on a potential service provider, it is expected that this entity will take into account other factors besides the shorter notification period in accordance with Section 4.3.1.2 of the circular. The fact that a support PFS is itself a supervised entity which, for example, must comply, like all or part of its financial sector clients, with Circular CSSF 20/750 on information and communication technology (ICT) and security risk management and with Circular CSSF 22/806 on outsourcing arrangements or which knows well the national specificities is certainly also of great interest to financial institutions.

Furthermore, the CSSF requests support PFS to inform it when they intend to market a new service and to provide it with all the information on this service it deems necessary, which will also be of interest to potential clients of support PFS. In this context, some support PFS also reflected on the criteria to be used to determine whether to inform the CSSF. Without providing an exhaustive list of possible criteria, one should bear in mind that a new service for which 'yes' would be the answer to at least one of the following questions should always be reported to the CSSF:

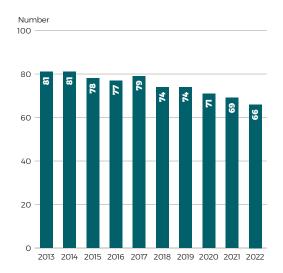
- i) Will it be offered to a great number of supervised entities?
- ii) Is it linked to new or innovative technologies, demonstrating new expertise of the support PFS (for example, services related to cloud, DLT, artificial intelligence, etc.)?
- iii) Does it allow the supervised entities to meet new regulatory requirements (for example, management/operation of PSD2 or CEDRS (central electronic data retrieval system related to IBAN accounts and safe-deposit boxes) APIs, regulatory reports, etc.)?
- iv) Does it represent a key change in the support PFS' strategy?

3.2. Development of support PFS in 2022

3.2.1. Development in the number of support PFS

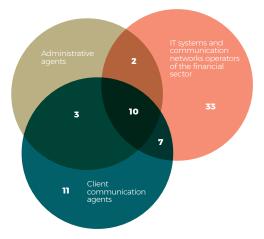
The number of support PFS was 66 as at 31 December 2022.

Development in the number of support PFS



In 2022, three support PFS gave up their authorisation.

Breakdown of support PFS by status



As administrative agents are ipso jure authorised to carry out the activities of client communication agents, there is no entity that only has the status of administrative agent.

3.2.2. Development in employment

The number of support PFS staff slightly decreased from 8,951 people as at 31 December 2021 to 8,704 people as at 31 December 2022.

Year	Number of support PFS	Total staff
2013	81	8,971
2014	81	9,043
2015	78	9,218
2016	77	9,185
2017	79	9,656
2018	74	9,931
2019	74	10,005
2020	71	8,987
2021	69	8,951
2022	66	8,704

Development in support PFS employment

3.2.3. Development of balance sheets and net results

The balance sheet total of support PFS reached EUR 1,680.3 million as at 31 December 2022, against EUR 1,628.9 million as at 31 December 2021, i.e. an increase of 3.16%.

The net results grew by 27.77%, from EUR 70.4 million as at 31 December 2021 to EUR 90.0 million as at 31 December 2022. This rise was notably due to the strong increase in the net results of four support PFS.

3.3. Prudential supervisory practice

3.3.1. Qualification of activities and authorisation applications

The qualification of activities under the Law of 5 April 1993 on the financial sector is often the first contact between an entity and the CSSF and allows determining whether a business activity falls within the scope of the aforementioned law and, consequently, requires an authorisation. The CSSF processes on average several tens of qualifications of activities and related questions per year. When the CSSF qualifies an activity as activity subject to the law, it informs the entity thereof and the authorisation procedure starts.

In 2022, the CSSF received five applications for authorisation as support PFS and two applications for the extension of authorisation. The five application files are currently being pre-examined. One application for the extension of authorisation was granted whereas the other is being pre-examined.

3.3.2. Main prudential findings

Whereas the two preceding years were marked by an improvement with respect to the obligation to file a notification and obtain prior approval by the CSSF for certain types of changes during the life of the support PFS, the CSSF noted a slight regression on the part of some support PFS during 2022.

All authorised support PFS must pay particular attention to compliance with Articles 15, 18, 19 and 22 of the Law of 5 April 1993 on the financial sector. In 2022, the CSSF has identified about 15 cases relating to changes made without communication to the CSSF and, thus, without prior approval.

As a reminder, Article 15(6) of the Law of 5 April 1993 on the financial sector specifies that any change made to the object, name or legal form and the setting-up or acquisition of any subsidiary in Luxembourg and subsidiary or branch abroad must be subject to authorisation granted by the CSSF (authorisation not to be confused with the initial support PFS authorisation). In other words, each time a support PFS wishes to make such a change which incidentally modifies the initial authorisation, it must submit a prior request to the CSSF so that the latter can examine the change and, where appropriate, give its approval.

Similarly, paragraphs 5 and 16 of Article 18 of the aforementioned law relating to shareholders specifies that the acquisition or disposal of a qualifying holding, as well as the (upward or downward) passing of one of the thresholds defined in the law must be subject to a prior written notification to the CSSF.

Article 19(4) relating to, among others, the management body works on the same principle of prior request by requiring that any change in the membership of the management body be communicated in advance to the CSSF.

Furthermore, Article 22 on external auditing expressly provides for a prior authorisation by the CSSF in case of any change.

3.3.3. Introductory visits

Introductory visits are made on the premises of support PFS that recently received their authorisation and, where appropriate, of existing support PFS that received an authorisation to carry out a new activity in addition to existing authorisations. The purpose of these missions is to verify that the contemplated business plan is being followed and that the systems and infrastructures are correctly implemented. In 2022, the CSSF visited two support PFS.

3.3.4. Capital base

In accordance with Article 20 and Articles 29-1 to 29-6 of the Law of 5 April 1993 on the financial sector, authorisation as support PFS is subject to the production of evidence showing the existence of minimum capital base for a PFS authorised as a legal person.

In 2022, the CSSF identified cases of non-compliance with the legal provisions in this respect by five entities (against six entities in 2021). Their situation was regularised in a satisfactory manner. IX. Supervision of payment institutions and electronic money institutions



1. Regulatory framework and supervisory practice

The Law of 10 November 2009 on payment services imposes authorisation, exercise and supervisory conditions on payment institutions and electronic money institutions that provide payment services or that issue electronic money.

The CSSF's prudential supervision aims to verify that payment institutions and electronic money institutions subject to its supervision continuously observe the provisions of laws, regulations or agreements relating to their organisation and operations, with the objective of ensuring protection of payment service users and electronic money holders as well as the stability of the financial system. In this regard, the CSSF notably attaches particular importance to the establishment, by these institutions, of stable and performing mechanisms for safeguarding the funds of payment service users and electronic money holders.

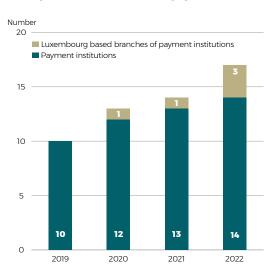
Moreover, the CSSF is continuing its actions in order to ensure the deployment by payment institutions and electronic money institutions of compliant IT solutions that guarantee the security of the transactions and the secure access to payment accounts as well as of fraud mitigation measures relating to the different means of payment in accordance with the relevant European rules.

2. Development of payment institutions and electronic money institutions in 2022

2.1. Development of the number of payment institutions and electronic money institutions

2.1.1. Payment institutions

In 2022, one new payment institution was listed in the public register of payment institutions, bringing the total number of institutions listed in the public register of payment institutions to 14 (compared to 13 in 2021). Moreover, there were nine branches established in other EU Member States by three of these authorised institutions as well as three branches established in Luxembourg by payment institutions authorised in other EU Member States.

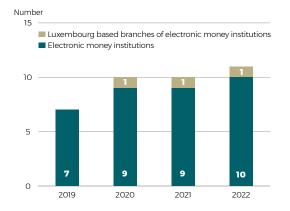


Development of the number of payment institutions

2.1.2. Electronic money institutions

In 2022, one new electronic money institution was listed in the public register of electronic money institutions, bringing the total number of institutions listed in the public register of electronic money institutions to 10 (compared to nine in 2021). Moreover, there was one branch established in another EU Member State by an electronic money institution authorised in Luxembourg, as well as one branch established in Luxembourg by an electronic money institution authorised in another EU Member State.

Development of the number of electronic money institutions



2.2. Payment services provided

The Annex to the Law of 10 November 2009 on payment services lists the payment services that payment institutions and electronic money institutions may be authorised to provide. As at 31 December 2022, the institutions authorised to provide such services were broken down as follows.

Number of institutions authorised by payment service

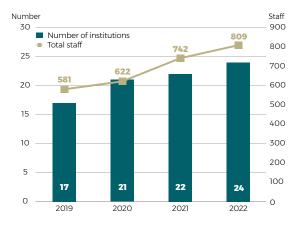
Payment service	Number of institutions
1 - Cash placement on a payment account	0
2 - Cash withdrawal from a payment account	1
3 - Execution of payment transactions, including transfers of funds	15
4 - Execution of payment transactions where the funds are covered by a credit line	2
5a) - Issuing of payment instruments	6
5b) - Acquiring of payment transactions	16
6 - Money remittance	6
7 - Payment initiation service	2
8 - Account information service	1

These services are provided in Luxembourg and on the territory of other EU Member States through the establishment of branches, by engaging one or several agents and by way of free provision of services.

2.3. Development in staff numbers within payment institutions and electronic money institutions

In 2022, the number of staff employed by payment institutions and electronic money institutions increased by 9%, representing 809 jobs in Luxembourg as at 31 December 2022.

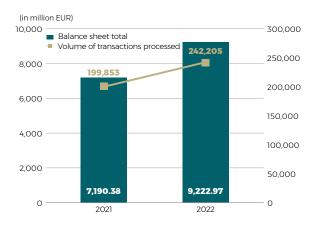
Development in staff numbers within payment institutions and electronic money institutions



2.4. Development of the balance sheet total and of the volume of transactions processed by payment institutions and electronic money institutions

The balance sheet total of payment institutions and electronic money institutions amounted to EUR 9.2 billion as at 31 December 2022, representing an increase of approximately 28% compared to the end of 2021. In 2022, these institutions processed an overall volume of payment transactions of about EUR 242 billion, i.e. an increase by 21% as compared to the end of 2021. These increases were essentially linked to the development of acquiring of payment transactions services, in particular those related to the development of e-commerce.

Development of the balance sheet total and of the volume of transactions processed by payment institutions and electronic money institutions



3. Prudential supervision of payment institutions and electronic money institutions

In the framework of its prudential supervision through a risk-based approach, the CSSF notably ensures compliance by payment institutions and electronic money institutions with the safeguarding requirements of funds of payment service users and electronic money holders, the requirements on central administration, on the sound and prudent management of these institutions, including maintaining an adequate capital base, as well as the requirements relating to payment security.

As regards, in particular, the supervision for the purposes of the fight against money laundering and terrorist financing, please refer to Chapter XXI of this report.

The CSSF intervenes at these institutions through interviews with the members of the management bodies and with the internal control functions, as well as through observation letters.

In this context, the CSSF notably points out the exchanges relating to:

- the internal control framework ensuring the sound and effective safeguarding of the funds of payment service users and electronic money holders and in particular the decision-making, reporting and oversight processes established by these institutions;
- the central administration and the existence in Luxembourg of the management body in its management function and of internal control functions, notably having regard to the development of telework and considering the requirements set out in Circular CSSF 21/769 on telework applicable since July 2022;

- the internal control and governance arrangements established in the context of operational and/or IT outsourcings, in particular with reference to the entry into force of Circular CSSF 22/806 on outsourcing in 2022;
- the evolution and development of the institutions' human and technical means in the context of the development and/or extension of their payment and electronic money services;
- the implementation of adequate, relevant and efficient reporting and escalation procedures, in particular with regard to information originating from the internal control functions, or from the *réviseur d'entreprises agréé* (approved statutory auditor), to the management bodies, as well as the completeness of the decision-making and oversight processes by these bodies.

X. Supervision of investment fund managers and UCIs



1. Key figures for 2022

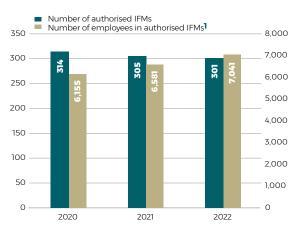
1.1. Investment fund managers (IFMs)

301 authorised IFMs as at 31 December 2022

EUR 6,124.7 bn

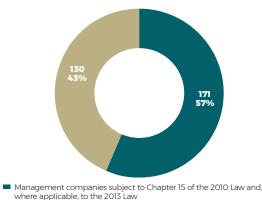
assets under management, of which 80.7% managed by authorised IFMs

Evolution of the number of authorised IFMs and of their employees



¹ The number of employees does not include employees of these IFMs' branches.

Breakdown of authorised IFMs by category



Alternative investment fund managers subject to the 2013 Law

1.2. Undertakings for collective investment (UCIs)

3,377 UCIs registered on the official list as at 31 December 2022





1.3. Prudential supervision



interventions related to off-site supervision of UCIs



on-site inspections at IFMs, covering 24% of the total assets managed by authorised IFMs

sanctions imposed on IFMs following an on-site inspection

1.4. AML/CFT

AML/CFT colleges for Luxembourg IFMs fulfilling the conditions defined in the EBA guidelines on AML/CFT colleges



face-to-face meetings

sanctions imposed on the dirigeants (directors)

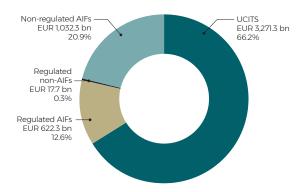
of two UCIs in the context of the off-site supervision

AML/CFT on-site inspections

1,578

participants in the virtual AML/CFT conferences on collective management of 1 July and 15 December 2022

Breakdown of assets managed by authorised IFMs by type of investment vehicle



2. Major events in 2022

2.1. The Ukraine crisis

The year 2022 was marked by the war in Ukraine. The outbreak of the war in February 2022 impacted in particular the tradability and valuation of certain assets held by investment funds as a result of the international sanctions and of the closure of certain markets.

From a global point of view, the redemptions observed in regulated investment funds were, in general, limited, although some isolated funds recorded significant ones.

Overall, Luxembourg regulated investment funds had limited direct exposure to assets impacted by the crisis, with exposures of EUR 16.3 billion to Russia, EUR 4.3 billion to Ukraine and EUR 0.5 billion to Belarus, representing around 0.4% of the total assets under management of these funds at the end of January 2022.

On 25 February 2022, the CSSF reactivated its crisis reporting for a panel of 130 IFMs, composed of the largest IFMs and/or the IFMs exposed to Russia or Ukraine (representing around 90% of the net assets of Luxembourg regulated investment funds), in order to collect information and daily data on significant developments and issues relating to their managed funds (such as, for example, large redemptions or valuation or liquidity issues), as well as on the decisions and measures taken to address them (such as, for example, the use of liquidity management tools).

In response to the difficulties linked to assets that had become non-tradable or that were facing valuation issues, some investment funds with a higher exposure to assets directly impacted by the Ukraine crisis suspended their redemptions, whereas less exposed UCIs generally switched to fair valuation adjustments for this type of assets, without having to suspend their redemptions.

The main valuation approach that emerged over time and was adopted for affected equity positions and for bonds denominated in Russian rouble consisted in reducing the valuation of these securities to zero or close to zero. The situation was quite different for investment funds that suspended redemptions, depending on their exposure to assets directly impacted by the crisis. The suspension of some of these funds lasted even beyond 2022, whereas other funds were liquidated in 2022, and only a few investment funds were authorised to create side-pockets to segregate the assets concerned and were thus in a position to lift the suspension for the part of the portfolio which was not impacted.

On 31 March 2022, the CSSF published an FAQ document² providing guidance on the application of liquidity management tools in the specific context of the Ukraine crisis, detailing notably the possibility given to impacted UCITS to make use of side-pockets under certain conditions.

Moreover, the CSSF monitored, via a dedicated survey, the valuations applied by IFMs of assets directly impacted by the crisis and the related processes. Although the survey showed that governance relating to the valuation of these assets worked relatively well, the CSSF identified a certain number of practices that need to be improved, as detailed below:

- in most cases, the policies and procedures, including, in particular, the internal rules on fair value measurements, did not adequately cover valuation practices in the event of a crisis;
- in some instances, the review of the valuation policies and procedures by the senior management was not adequately documented (validation dates, versioning);
- the operating rules of the valuation committee (notably the roles and responsibilities) were not always sufficiently clear;
- in certain cases, the minutes of meetings of the board of directors and of the valuation committee did not include sufficient information to fully understand the reasons underpinning the valuation decisions.

² https://www.cssf.lu/en/Document/ukraine-crisis-faqs-on-theapplication-of-liquidity-management-tools-by-investmentfunds/

The CSSF will continue its work on that topic in 2023, including within the context of ESMA's Common Supervisory Action on valuation of UCITS and open-ended AIFs, and it will, in particular, follow up on the observations made.

Furthermore, the CSSF also had frequent exchanges with other EU and third-country supervisory authorities in relation to the Ukraine crisis.

2.2. Liability Driven Investment Funds (LDI Funds)

Following the announcement of the budget proposal by the UK government at the end of September 2022, the yields of UK government bonds (gilts) soared to unprecedented high levels.

The rises in interest rates affected, most notably, leveraged LDI Funds with a portfolio mainly exposed to gilts, the purpose of these funds being to cover, in particular, interest rate and inflation risks on behalf of their investors (in this case, UK defined benefit pension funds).

The liquidity buffers of these funds tended not to be sufficiently calibrated to withstand the margin calls resulting from this major and sudden interest rate rise, and the recapitalisation process with their investors turned out to be often too slow during a rapidly evolving interest rate environment. The pressure decreased with the Bank of England's announcement of an intervention in the gilt market.

In Luxembourg, three investment fund managers are active in the segment of LDI Funds denominated in GBP. The CSSF was in close contact with these market players to monitor the action plans implemented to improve the resilience of the LDI Funds before the end of the Bank of England's intervention programme, in particular as regards substantial increases in liquidity buffers to withstand interest rate shocks and swifter recapitalisation procedures in crisis situations, where necessary. On 30 November 2022, following a series of discussions with the Central Bank of Ireland and ESMA, the CSSF sent a letter to the managers of the LDI Funds denominated in GBP, requesting them to maintain the high levels of resilience that had been built up (300 to 400 basis points)³. Further actions are currently being reviewed in coordination with the other authorities involved to establish a framework that will ensure resilience in the event of future stresses for these funds.

2.3. Environmental, Social and Governance (ESC)

The first provisions of Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment (Taxonomy Regulation) entered into force on 1 January 2022. In compliance with this deadline, the CSSF published a communiqué outlining the way forward, in particular as regards transparency requirements in the pre-contractual documentation of UCITS and AIFs under the SFDR and the Taxonomy Regulation. This communiqué introduced a fast track procedure for the submission of amendments to the pre-contractual documentation of existing UCITS and AIFs to the CSSF.

On the legislative front, Delegated Regulation (EU) 2022/1288 of 6 April 2022, published in the Official Journal of the EU on 25 July 2022, supplements Regulation (EU) 2019/2088 with regard to regulatory technical standards specifying the details of the content and presentation of the information in relation to the principle of "do no significant harm" and specifies the content, methodologies and presentation of information in relation to sustainability indicators and adverse sustainability impacts, and the content and presentation of the information in relation to the promotion of environmental or social characteristics and sustainable investment objectives in pre-contractual documents, on websites and in periodic reports. The CSSF also published FAQs on sustainability-related disclosures in the financial services sector.

³ https://www.cssf.lu/en/2022/11/communication-from-the-cssfon-liability-driven-investment-funds/

2.4. Common Supervisory Actions (CSA) by ESMA

2.4.1. 2022 CSA on the valuation of less liquid assets held by UCITS and open-ended AIFs

In January 2022, ESMA launched a CSA together with national competent authorities on the supervision of asset valuation methodologies under the UCITS Directive and the AIFMD across the EU.

The purpose of this exercise was to assess, promote and ensure:

- compliance of supervised entities with the relevant organisational requirements of the UCITS and AIFMD frameworks relating to asset valuation;
- adherence to valuation principles and methodologies with a view to reflecting a true and fair value of their financial positions both under normal and stressed market conditions in line with the applicable rules.

The CSA focussed in particular on investment fund managers of open-ended funds investing in less liquid assets of the following categories:

- unlisted equities;
- unrated bonds;
- corporate debt;
- real estate;
- high yield bonds;
- emerging market equities or bonds;
- listed equities that are not actively traded;
- bank loans.

In 2022, the CSSF analysed the information collected from a sample of IFMs and drew up a summary report for ESMA. This sample was composed of 30 IFMs domiciled in Luxembourg, of which 25 hold both UCITS and AIFM authorisations, two only a UCITS authorisation and three only an AIFM authorisation. The CSSF observed an overall satisfactory level of compliance by supervised entities with the applicable regulations, but it also identified 21 cases of non-compliance by 12 IFMs and 81 deficiencies at 29 IFMs.

As far as the instances of non-compliance with the applicable regulations are concerned, it should be mentioned, in particular, that certain market players must:

- improve the content of the valuation policies/ procedures as regards (i) information on the roles and responsibilities of all the parties involved in the valuation process, and (ii) information on the control of prices provided by third parties;
- carry out a review of the valuation policies/procedures at least once a year;
- carry out and document the validation of the valuation model;
- carry out an assessment of the quality of data/models provided by external parties;
- implement sufficient and appropriate checks and controls on the reasonableness of each valuation with an appropriate degree of objectivity;
- draw up the policy relating to NAV calculation errors and the relevant remedial procedure.

Based on the work performed, the CSSF is also of the opinion that IFMs will have to strengthen their current arrangements and frameworks on asset valuation by focussing, among others, on the following aspects:

- address the lack of clarity of the valuation-related policies and procedures documentation (for instance, strong dependence on the valuation policies of the group to which the IFM belongs, use of multiple documents) by:
 - improving the information on the allocation of tasks and responsibilities of all parties involved in the valuation process;
 - improving the description of the independence of the valuation function;

- improving the description of the circumstances requiring an update of the policies/procedures;
- providing details on the controls performed on the prices obtained by the third-party service provider from the pricing vendors;
- improve transparency in the fund prospectuses as regards valuation methodology, disclosure of governance arrangements and independence of the valuation function, in particular where the involvement of the portfolio management function in the valuation process is stronger;
- improve the remuneration policies of persons engaged in the valuation function;
- improve the NAV calculation error policies as regards their scope (e.g. for alternative funds);
- improve the due diligence conducted on external valuers as regards the mandatory professional registration of the external valuer.

The CSSF also observed an overall lack of involvement of the depositaries in the verification of the IFMs' valuation framework, process and procedures.

The CSSF considers that the independence of the valuation function must be ensured when using third-party valuers. In particular, safeguards have to be implemented to ensure the strict independence of valuations, and the asset valuations provided by third-party providers have to be submitted to independent analyses to ensure their exactness and robustness in any market conditions.

Moreover, it should be ensured that mechanisms for early detection of potential valuation errors are in place and that transparency towards investors is guaranteed in such circumstances. This transparency also includes the manner in which errors, which would have negatively impacted investors, are compensated.

2.4.2. Follow-up on the 2021 CSA on costs and fees of UCITS

In January 2021, ESMA launched a CSA with national competent authorities on the supervision of costs and fees of UCITS across the EU. Throughout 2021, the CSSF analysed the information collected from a sample of IFMs and drew up a summary report for ESMA.

In May 2022, ESMA published an EU consolidated report which sets out the results of the CSA⁴. In October 2022, the CSSF published the conclusions of its review on the sample of Luxembourg IFMs⁵ which are consistent with the findings of ESMA.

In its publication, the CSSF also issued recommendations for improvements regarding the pricing process and the policies and procedures relating to the use of Efficient Portfolio Management (EPM) techniques and instruments. On this basis, the CSSF asked all IFMs managing UCITS and/or AIFs to conduct, by the end of March 2023, a self-assessment with regard to the compliance of their pricing process with the applicable regulatory provisions, in order to take, if applicable, the necessary corrective measures.

Moreover, to follow up on the CSA observations, the CSSF took supervisory actions, among others, in the form of on-site inspections and bilateral contacts, to remedy the shortcomings detected.

As the supervision of costs and fees charged to funds remains a priority for the CSSF, further investigations will be performed in 2023.

⁴ https://www.esma.europa.eu/press-news/esma-news/esmareports-supervision-costs-and-fees-in-investment-funds

⁵ https://www.cssf.lu/en/Document/esma-common-supervisoryaction-on-the-supervision-of-costs-and-fees-of-ucits/

2.5. Implementation of the regulations on cross-border distribution of UCIs (CBDF Regulations)

In the context of the implementation of the CBDF Regulations, notably Regulation (EU) 2019/1156 of 20 June 2019 on facilitating cross-border distribution of collective investment undertakings (CBDF Regulation) and the Law of 21 July 2021 transposing Directive (EU) 2019/1160, the CSSF amended and developed its instructions with regard to notifications and introduced, on 1 July 2022, standardised de-notification and pre-marketing procedures via its eDesk platform.

Circular CSSF 22/795 (CBDF Circular) of 31 January 2022 implemented, as from 2 February 2022, the ESMA Guidelines on marketing communications (ESMA34-45-1272) under Article 4 of the CBDF Regulation. In September 2022, the CSSF published an FAQ document specifying the requirements applicable to marketing communications under the CBDF Regulations.

In accordance with the CBDF Regulation, the CSSF must provide ESMA every two years with a report covering, inter alia, the most frequent infringements observed based on the ex post verification of a sample of marketing communications. To this end, and pursuant to the CBDF Circular, the CSSF collected information on marketing communications from a sample of IFMs in 2022 and verified the compliance of these communications with the requirements set out in Article 4 of the CBDF Regulation, as specified in the ESMA Guidelines adopted by the CSSF. These verifications concerned a sample of marketing communications.

2.6. Operationalisation of Circulars CSSF 21/788, CSSF 21/789 and CSSF 21/790 (reform of the long form report)

Following the entry into force of Circulars CSSF 21/788, CSSF 21/789 and CSSF 21/790 concerning IFMs and UCIs and the first year of submission of the new documents introduced by these circulars, the CSSF continued its work on the operationalisation of the reform of the long form report in 2022, notably as regards:

- the implementation of the management letter, self-assessment questionnaire and separate report for IFMs and UCIs, as well as the AML report on the CSSF's eDesk platform;
- the development of additional functionalities to, on the one hand, facilitate access to the platform and allow for a more efficient management of the access rights for *cabinets de révision agréés* (approved audit firms) and, on the other hand, improve the use of the tool (for instance, automatic generation of the management letter's cover page);
- the development of guidance providing further clarifications to the market and *réviseurs d'entreprises agréés* (approved statutory auditors), among others as regards the procedures for accessing and completing the questionnaires (please refer to the CSSF communiqué dated 22 July 2022, FAQs CISERO/IRE, tooltips added to the questionnaires, etc.);
- the integration of the new reports introduced by these circulars in the CSSF's prudential supervisory practice based on a risk-based approach.

3. Prospects for 2023

3.1. Environmental, Social and Governance (ESC)

On the legislative front, the remaining provisions of the Taxonomy Regulation entered into force on 1 January 2023. Delegated Regulation (EU) 2022/1288 of 6 April 2022, supplementing Regulation (EU) 2019/2088 with regard to regulatory technical standards specifying the details of the content and presentation of the information in relation to the principle of "do no significant harm" and specifying the content, methodologies and presentation of information in relation to sustainability indicators and adverse sustainability impacts, and the content and presentation of the information in relation to the promotion of environmental or social characteristics and sustainable investment objectives in pre-contractual documents, on websites and in periodic reports also entered into force on 1 January 2023. Commission Delegated Regulation (EU) 2023/363 of 31 October 2022 amending and correcting the regulatory technical standards laid down in Delegated Regulation (EU) 2022/1288 as regards the content and presentation of information in relation to disclosures in pre-contractual documents and periodic reports for financial products investing in environmentally sustainable economic activities was published in the Official Journal of the EU on 17 February 2023. The related provisions entered into force on 20 February 2023.

Compliance of the IFMs' and investment funds' activity with the different levels of EU legislation on sustainable finance will continue to be a supervisory priority of the CSSF in 2023.

In 2023, ESMA will launch a CSA in relation to sustainability risks and disclosures. The purpose of this exercise will be to verify compliance of the IFMs' and investment funds' activity with the SFDR Level 1 and Level 2 provisions as well as with the requirements outlined in the ESMA *Supervisory briefing – Sustainability risks and disclosures in the area of investment management* published on 31 May 2022.

3.2. Follow-up on the operationalisation of Circulars CSSF 21/788, CSSF 21/789 and CSSF 21/790

Following the receipt of the new documents introduced by Circulars CSSF 21/788, CSSF 21/789 and CSSF 21/790 for IFMs and UCIs, the CSSF will continue its work on the operationalisation of the reform of the long form report in 2023.

This work will focus, in particular, on the following topics:

- the implementation of the first annual separate reports drawn up by the réviseurs d'entreprises agréés for SIFs and SICARs as from the financial years closing on 30 June 2023, in accordance with the phase-in period laid down in Circular CSSF 21/790;
- the further development of functionalities allowing an efficient use and management of the documents in eDesk, also via the implementation of functionalities allowing a smoother transmission of the information and data set out, notably, in the self-assessment questionnaire for investment funds;
- the review and update of the questions included in these reports and of the relevant guidance, taking into account the feedback received and the regulatory developments, including, among others, for UCIs (i) the update of existing questions in the self-assessment questionnaire and in the separate report in relation to the new ESG provisions and the reform of Circular CSSF 02/77, and (ii) the integration of an AML/CFT section in the separate report of UCIs managed by a foreign IFM.

3.3. Revision of Circular CSSF 02/77

In 2022, the CSSF worked on the revision of Circular CSSF 02/77 on the protection of investors in case of NAV calculation error and correction of the consequences resulting from non-compliance with the investment rules applicable to UCIs. This revision aims at integrating the regulatory developments in the investment fund sector of the past 20 years into the new circular, while taking into account the experience gained by the CSSF in the framework of its prudential supervision of UCIs. The work will be finalised in 2023.

4. Prudential supervisory practice

The CSSF's prudential supervision aims to ensure that IFMs and UCIs subject to its supervision continuously observe all legal, regulatory or contractual provisions relating to their organisation and operation, with the objective to ensure investor protection and stability of the financial system.

Prudential supervision is exercised notably via:

- off-site supervision based on the analysis of the periodic financial information, annual reports, other reports (including the reports of the réviseurs d'entreprises) and regular or ad hoc information received by the CSSF;
- on-site supervision, i.e. on-site inspections carried out by the CSSF agents at the offices of supervised entities.

4.1. Off-site supervision of UCIs

4.1.1. Supervision based on closing documents of UCIs

In the framework of the review of annual reports, management letters and long form reports⁶, as well as of the new reports introduced by Circular CSSF 21/790, i.e. the self-assessment questionnaire (SAQ) and the separate report (SR) to be submitted annually by UCIs, the CSSF had to intervene with certain funds and/or their IFMs.

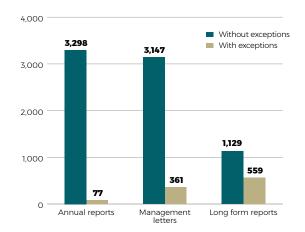
These interventions aimed notably at addressing the deficiencies noted by the *réviseurs d'entreprises agréés* in the annual reports, management letters, long form reports and in the separate reports, as well as the deficiencies noted in relation to the information provided in the UCI's SAQs.

In 2022, in the context of the review of the above-mentioned documents, the CSSF sent 382 letters and emails with the aim of analysing the deficiencies noted by the *réviseurs d'entreprises agréés*, following up on the measures implemented and/or requiring corrective measures in order to remedy these deficiencies, including the compensation of funds and/or investors, as well as imposing sanctions on UCIs in case of non- compliance with the applicable legal and regulatory provisions.

The CSSF's interventions concerned, inter alia, investment valuation, governance, compliance with investment restrictions and policies, AML/CFT arrangements, costs/fees charged to funds as well as transparency and disclosure in the funds' annual reports.

The following chart highlights, per type of closing document, the number of documents received in 2022 in which one or several exceptions were noted, in particular, by the *réviseur d'entreprises agréé* and which were subject to a review and/or intervention by the CSSF.

⁶ While the annual reports and management letters concern UCI(TS), SIFs and SICARs, the long form reports only concern UCIs subject to the 2010 Law, i.e. UCITS Part I and UCIs Part II.



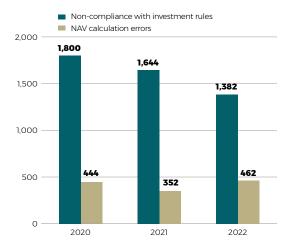
Number of closing documents with or without exceptions noted in 2022

Additionally, following the reform of the long form report, the CSSF received 463 SAQs and 102 SRs in 2022, which have to be submitted on an annual basis by UCIs and *réviseurs d'entreprises agréés*, respectively.

4.1.2. NAV calculation errors and non-compliance with investment rules

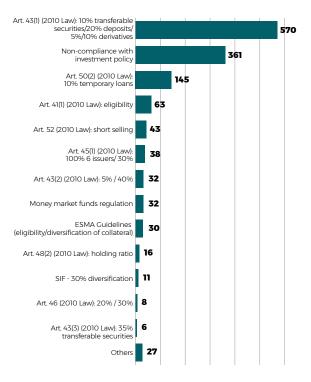
In 2022, the CSSF received 1,844 declarations on the basis of Circular CSSF 02/77, compared with 1,996 declarations in 2021, representing a decrease of 7.6%.

Evolution of the number of NAV calculation errors and instances of non-compliance with investment rules reported to the CSSF over the last three years



As in previous years, the simplified procedure provided for in Circular CSSF 02/77 could be applied in most cases of NAV calculation errors and non-compliance with investment rules. As regards the compensation procedures for investment funds and investors that exceed the tolerance thresholds laid down in Circular CSSF 02/77 ("normal procedures"), the CSSF received 173 notifications in 2022, against 113 in 2021, which represents a 53.1% growth.

Breakdown of the instances of non-compliance with investment rules in 2022



Failure to observe the legal and regulatory limits of diversification, holding and borrowing was the main source of non-compliance with investment rules with 958 cases (1,117 cases in 2021, i.e. -14.2%), followed by 361 cases of breaches of investment policy limits/rules defined in the sales documents (422 cases in 2021, i.e. -14.5%) and 63 cases of legal constraints breaches as regards asset eligibility (105 cases in 2021, i.e. -40.0%).

Compensation in relation to correction of NAV calculation errors or instances of non-compliance with investment rules⁷

(in EUR)	Investors		
	2020	2021	2022
Total amount of compensation following NAV calculation errors	11,811,192.3	11,349,231.9	21,187,863.8
Total amount of compensation following non-compliance with investment rules	0.0	0.0	8,318.0
(in EUR)	UCIs/Sub-funds		
	2020	2021	2022
Total amount of compensation			
following NAV calculation errors	11,846,992.7	4,463,176.3	26,901,611.6

In 2022, the total amount of compensation paid to UCIs/sub-funds in relation to both NAV calculation errors and non-compliance with investment rules increased compared to previous years. Overall, the total amount of compensation still remained moderate as compared to the total amount of assets under management.

4.1.3. Supervision based on the other reports and information received on a regular or ad hoc basis by the CSSF

On 14 June 2022, the CSSF published the working paper *An Assessment of Investment Funds' Liquidity Management Tools*⁸, a joint work with co-authors from the Bank for International Settlements (BIS), providing an empirical assessment of the effectiveness of liquidity management tools used by Luxembourg-domiciled UCITS during the COVID-19 pandemic and in previous years. The analysis focusses on the active management of the portfolio liquidity, on the use of swing pricing and on the temporary suspension of redemptions. The main findings of the study are the following:

- In general, UCITS increase their cash positions in periods of high volatility (such as the March 2020 market turmoil), which strengthens their resilience, but may also contribute to pro-cyclical selling of assets.
- UCITS frequently use swing pricing. Swing pricing mitigates dilution of the fund value in times of redemptions and dampens fund outflows during episodes of elevated market volatility, except during episodes of systemic stress, such as the March 2020 turmoil.
- UCITS rarely suspend redemptions. Suspensions often precede the permanent closure and liquidation of the fund. They may also lead to higher outflows from funds with similar asset portfolios.

4.2. Off-site supervision of IFMs

4.2.1. Long form report of IFMs

On 22 December 2021, the CSSF published Circular CSSF 21/789 introducing at the same time a self-assessment questionnaire (SAQ) to be submitted annually by the entities concerned and a separate report (SR) including specific procedures that the CSSF requests the *réviseur d'entreprises agréé* to perform in relation to the SAQ. The circular also establishes a specific regulatory framework applicable to the management letter to be drawn up by the *réviseur d'entreprises agréé* on an annual basis.

All SAQs have been submitted within the set deadlines. However, certain entities did not observe the submission deadlines for the SR and the management letter. The CSSF reiterates that these reports must be submitted within the deadlines, i.e. for financial years ending after 31 December 2021, the SAQ must be submitted within four months, the management letter within seven months and the SR within seven months after the end of the IFM's financial year.

The CSSF also reiterates that the management companies subject to Article 125-1 of Chapter 16 of the 2010 Law fall under the scope of application of points 4.1 and 4.2 of that circular.

⁷ The data as at 31 December 2022 are incomplete as the final compensation amounts have not yet been finalised for some files.

⁸ https://www.cssf.lu/en/2022/06/publication-of-cssf-workingpaper-an-assessment-of-investment-funds-liquiditymanagement-tools/

Based on the feedback received from the entities and the *réviseurs d'entreprises agréés*, several items of the reports made available for the second reporting year have been amended or added (e.g. certain questions, tooltips, "comment" section for entities in the SAQ). The FAQs available in eDesk will also be updated in order to include the main recurring questions. For any question and/or in case of technical issues, the entities may contact the CSSF at cisero@cssf.lu.

4.2.2. Compliance survey

In May 2022, the CSSF launched a thematic survey on the compliance function targeting 111 IFMs authorised as management companies subject to Chapter 15 of the 2010 Law and/or AIFMs authorised under Chapter 2 of the 2013 Law. The survey concerned the following topics:

- Governance
 - *Dirigeant* (director) in charge of the compliance function (experience, professional background, etc.), time allocated to the function, accumulation of responsibilities;
 - Compliance officer (experience, professional background, etc.), time allocated to the function;
- Organisation
 - Scheme of the function (delegation/internalisation, support);
 - Compliance team (size, experience, etc.);
 - Scope of the function (investment restrictions, AML/CFT Know-your-customer);
 - Training;
- Work
 - Compliance monitoring plan (content, tools used, volume of annual controls).

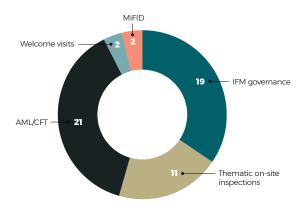
The outcome and conclusions of the survey will be published in 2023.

4.3. On-site supervision

The "UCI on-site inspections" (OPC CSP) department carries out in-depth reviews of the IFMs' business models and governance, AML/CFT inspections, thematic on-site inspections as well as welcome visits aiming at ensuring that recently authorised IFMs comply with the requirements of their authorisation. The "Prudential supervision and risk management" department performs thematic on-site inspections on risk management, procedures related to Circular CSSF 02/77 and money market UCIs.

AML/CFT on-site inspections are described in point 1.2. of Chapter XXI "Financial crime".





All the inspected entities taken together managed about 24% of the total assets under management at Luxembourg IFMs. Among these entities, 22 authorised IFMs managed assets amounting to over EUR 10 billion. In addition to the authorised IFMs, the population of the inspected entities also included one registered IFM, one UCITS and one SIF.

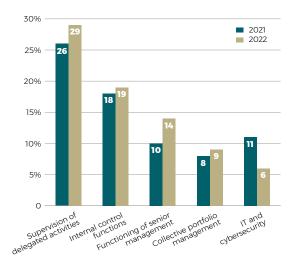
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The 11 thematic on-site inspections covered the following themes:

- five inspections dealt with sustainability/ESG aspects of the IFMs' activities ("ESG thematic controls");
- three inspections concerned the valuation function of IFMs;
- three inspections focussed on the IFMs' supervision of costs and fees to be borne by UCITS.

The CSSF also carried out 11 on-site inspections at UCI service providers, of which six at depositary banks, four at professional depositaries of assets other than financial instruments and one at a UCI administrator.

Main categories of observations following on-site inspections



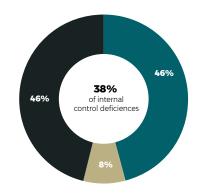
• 16 inspected IFMs showed shortcomings relating to the supervision of delegated activities (against 15 in 2021).

In the framework of the on-site inspections concerning the IFM's governance, the CSSF again observed shortcomings regarding the supervision of delegates. In this context, it issued administrative fines against four IFMs for which these deficiencies were identified. • 16 inspected IFMs showed weaknesses within their internal control functions (against 21 in 2021).

The CSSF noted shortcomings with respect to internal control functions, with most deficiencies relating to the compliance function and a substantial increase in the shortcomings relating to the internal audit function.

The most frequent shortcomings observed with respect to the compliance function concerned the incomplete execution of the compliance monitoring plan.

Compliance: weaknesses identified in 2022

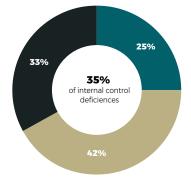


Organisational weaknesses (policies and procedures)
 Lack of communication and report comprehensiveness

Weaknesses relating to the compliance monitoring plan

As concerns the internal audit function, the CSSF observed that the internal audit charts were sometimes incomplete and that the internal audit plans did not systematically cover all of the IFMs' activities. Moreover, the internal auditors did not systematically ensure that their recommendations were adequately followed up by the management bodies.

Internal audit: weaknesses identified in 2022



Organisational weaknesses (policies and procedures)

- Non-exhaustive internal audit plan
- Incomplete internal audit chart

Observations in relation to valuation

The CSSF observed that some AIFMs performing the valuation function internally while relying on the work of a third party were not sufficiently involved in the valuation of the securities portfolios of the managed funds. In particular, the AIFMs concerned did not evaluate the reliability and the appropriateness of the data and models used by these third parties to perform the valuation of securities for which no market value is available.

• Observations regarding best execution supervision

Recurring deficiencies were observed in the IFMs' ongoing supervision of their delegated portfolio managers' compliance with best execution requirements. This supervision relied mostly on reports (issued by portfolio managers) found to be incomplete and established at an inappropriate frequency (taking into account the periodicity of the managed funds' NAV calculation).

The CSSF also noted that the best execution policies established by several IFMs described neither the controls performed by the latter, nor the thresholds used to control the various best execution factors (execution price, transaction cost, execution speed, etc).

Observations related to ESG thematic controls

The CSSF noted that certain IFMs had not been provided with the key performance factors (from delegated portfolio managers) allowing them to ensure that the securities portfolios were invested in accordance with the sustainability objectives.

Moreover, the CSSF identified several deficiencies in the implementation of the controls to verify compliance of the investment portfolios with the quantitative ESG restrictions laid down in the prospectuses of the managed investment funds.

Other observations

The CSSF noted that IFMs which delegated the execution of EMIR-related obligations were not systematically in a position to guarantee that the data reported by their delegates – on their behalf – to the trade repository was accurate and complete; this deficiency was mostly the result of an inadequate due diligence.

An increase in phishing and bank transfer fraud attempts was also observed. After collecting information on an entity's service providers, cybercriminals contact a person in charge of carrying out payments, pretending that the service provider's banking details have changed. Once this data is modified, the bank transfers booked by the victim entity will be transferred on the account of the fraudsters. The CSSF would like to remind IFMs that they must confirm the authenticity of such requests through a separate communication channel (via phone or mail) in order to prevent the risk of falling victim to a fraud.

Following the above-mentioned on-site inspections, the CSSF imposed administrative fines on several IFMs. For further details on this subject, please refer to point 2. of Chapter XVIII "Instruments of supervision". Moreover, the CSSF used its right of injunction against four IFMs. XI. Supervision of securitisation undertakings



1. Development of authorised securitisation undertakings in 2022

In 2022, the CSSF received one application for registration on the official list of authorised securitisation undertakings subject to the Law of 22 March 2004 on securitisation.

Following the registration of one securitisation undertaking in 2022, 29 securitisation companies were registered on the official list of authorised securitisation undertakings as at 31 December 2022 (28 entities at the end of 2021). The balance sheet total of authorised securitisation undertakings amounted to EUR 40.7 billion at the end of 2022, representing a decrease of EUR 6.9 billion against 2021. This fall is mainly due to the fact that the notional amount of issues that matured or were redeemed prematurely exceeded the notional amount of new issues and, to a lesser extent, to an unfavourable development of the market.

The submitted application files reveal that securitisation transactions mainly consist in repackaging transactions in the form of structured products issues linked to various financial assets, notably equity indices or baskets of shares, as well as in securitisation of debt, loans and other comparable assets. The repackaging transactions are mainly synthetic securitisation transactions in respect of the risk transfer technique.

In general, the securities issued by securitisation undertakings are bonds and subject to foreign law. It is also possible for some securitisation undertakings to issue warrants.

To date, no application file for a securitisation fund has been submitted to the CSSF. Neither has the CSSF received any application file for a fiduciary-representative under Luxembourg law, even though the Law of 22 March 2004 on securitisation has established a specific legal framework for these independent professionals in charge of representing investors' interests.

2. Development in the regulatory framework

The Law of 22 March 2004 on securitisation was amended by the Law of 25 February 2022 the purpose of which is to supplement and to adapt the law to market requirements. In the face of a changing financial world, the law on securitisation has thus been clarified and adapted in order to foster the development of transactions in the Luxembourg financial centre.

XII. Supervision of pension funds



1. Development of pension funds in 2022

1.1. Major events in 2022

As at 31 December 2022, 12 pension funds subject to the Law of 13 July 2005 on institutions for occupational retirement provision in the form of pension savings companies with variable capital (SEPCAVs) and pension savings associations (ASSEPs) were registered on the CSSF's official list of pension funds.

The year 2022 was marked by the addition of several new pension schemes to existing pension funds and by several cross-border transfers to other insurance products.

Thus, during the year, the CSSF authorised 10 new pension schemes within existing pension funds, one of which having been notified in accordance with Article 11 of Directive (EU) 2016/2341 of 14 December 2016 in order to carry out a cross-border activity on behalf of a sponsoring undertaking established in another EU Member State.

The CSSF expects the pension fund sector to keep growing in 2023, in particular through the continuing development of the existing pension funds' cross-border activities.

1.2. Pension funds activities

The pension funds supervised by the CSSF manage one or several pension schemes set up by Luxembourg companies or, for some of them, by foreign companies for their employees.

As at 31 December 2022, three pension funds managed cross-border pension schemes. They provided their services to sponsoring undertakings established in Belgium, Germany, Ireland, the Netherlands, Portugal and Spain as well as to non-EU sponsoring undertakings.

Ten out of the 12 pension funds registered on the CSSF's official list have adopted the legal form of a pension savings association and two have adopted the legal form of a pension savings company with variable capital.

1.3. Development of pension fund assets

At the end of 2022, gross assets of pension funds amounted to EUR 1,522 million against EUR 1,854 million at the end of 2021, representing an almost 18% fall. This decrease is notably due to cross-border transfers and to the overall decline of financial markets in 2022.



Development of pension fund gross assets

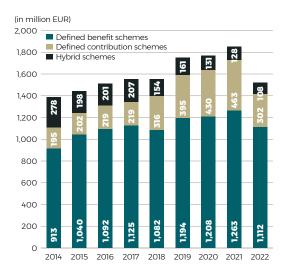
The assets of cross-border pension schemes amounted to EUR 490 million at the end of 2022 against EUR 695 million as at 31 December 2021, representing a 29.5% decrease.

1.4. Development of assets according to the type of pension scheme

As at 31 December 2022, total gross assets of pension funds break down as follows:

- 73% in defined benefit schemes (EUR 1,112 million);
- 27% in defined contribution and hybrid schemes (EUR 410 million).

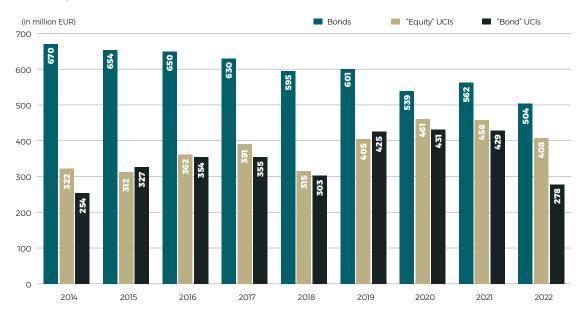
Breakdown of assets between defined benefit schemes, defined contribution schemes and hybrid schemes



1.5. Allocation of pension fund assets

In 2022, investments of pension funds break down as follows:

- EUR 863 million, i.e. 57% of the total gross assets, in investment funds, including:
 - 47% (i.e. EUR 408 million) exposed to the equity market;
 - 32% (i.e. EUR 278 million) exposed to the bond market;
 - 21% (i.e. EUR 177 million) in mixed funds, money market funds and funds with alternative investment policies;
- EUR 504 million, i.e. 33% of the total gross assets, in bonds;
- EUR 155 million, i.e. 10% of the total gross assets, in other assets, money market instruments, equity and liquid assets.



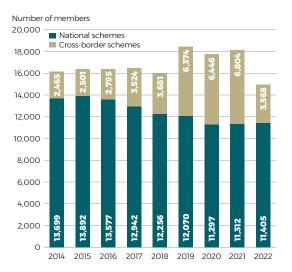
Allocation of pension fund assets

1.6. Development in the number of pension fund members

At the end of 2022, the pension funds counted 14,977 members against 18,116 as at 31 December 2021.

An analysis of the population of members of the pension funds supervised by the CSSF shows that the proportion of international members (3,568 members as at 31 December 2022) is falling compared to the previous years. This decrease results, in particular, from the transfer of several cross-border schemes outside the EU.

Development in the number of pension fund members



2. Development of liability managers in 2022

The official list of professionals authorised to act as liability managers for pension funds subject to the Law of 13 July 2005 included 14 liability managers as at 31 December 2022 (against 16 at the end of 2021).

XIII. Supervision of securities markets



1. Prospectuses for securities

In 2022, the CSSF was once again the European authority that approved the most prospectuses for securities published under Regulation (EU) 2017/1129 of 14 June 2017. This first place being regularly taken by the CSSF, it goes without saying that the CSSF attached a particular importance to the Peer Review of the approval procedures of prospectuses which took place at the beginning of 2022 and which is, together with the guidelines and questions and answers published by ESMA, one of the main tools to ensure a coherent approach to the application of this regulation in Europe.

The Peer Review covered five main areas, namely (i) the process of competent authorities' scrutiny of prospectuses with regard to their completeness, comprehensibility and consistency, (ii) the competent authorities' approval process, including the notification process, (iii) the application by competent authorities of ESMA's Guidelines 1 to 5, 7 and 11 on risk factors, (iv) the adequacy of the competent authorities' resources to carry out the scrutiny and approval of prospectuses, and (v) the independence as well as the liability regime of competent authorities in relation to the prospectus scrutiny process. The exercise involved a significant number of CSSF agents in charge of approving prospectuses for securities, in particular during the on-site visit in the first quarter of 2022. The collaboration and exchanges with the Peer Review team, composed of experts from ESMA and other European national authorities, were of a high quality. These exchanges, which enabled the CSSF to present its approach as well as its controls and tools developed in relation to the approval of prospectuses for securities, were highly appreciated by the experts involved. The CSSF succeeded in corroborating in a practical and efficient way its expertise and professionalism developed in this area.

As underlined in the published report, the CSSF, having been classified fully compliant on all the above-mentioned areas, can be highly satisfied with the outcome of the Peer Review, which demonstrates the robustness and quality of its teams' work in this field, considering the number of files to be dealt with and the short deadlines imposed by the regulation. The CSSF has been able to demonstrate its ability to make the best use of its resources to accomplish efficiently its mission, with a view to ensuring transparency and, thus, investor protection.

2. Enforcement of information published by issuers

Within the context of its mission of supervising securities markets, the CSSF is in charge of examining the information published by issuers of securities. Through this activity, generally known as enforcement, the CSSF notably ensures that the financial information complies with the relevant reporting framework, i.e. the applicable accounting standards. Moreover, since the entry into force of the Law of 23 July 2016 on the disclosure of non-financial information and diversity information by certain large undertakings and groups, transposing Directive 2014/95/EU of 22 October 2014, this control also extends to the sustainability information of the issuers covered by this law.

Beyond the legal and regulatory requirements, the examination of the financial and sustainability information contributes to the investors' protection and confidence in the financial markets.

2.1. Enforcement of financial information

In its communiqué of 31 January 2023, the CSSF presented the results of its 2022 enforcement campaign on financial information published by issuers of securities for 2021. The main observations of these examinations refer to issues related to the application of the international financial reporting standards (IFRS), some aspects of which were part of the priorities identified and communicated by ESMA and the CSSF. These examinations have notably allowed underlining or reminding of the following messages:

- In response to the increasing interest of investors and other stakeholders, the issuers need to clearly disclose in their financial statements the judgements and estimates in relation to climate-related matters as well as the related uncertainties when they consider these matters to be significant.
- Issuers must use reliable and appropriate assumptions in the estimation of recoverable amounts for assets subject to impairment testing. The CSSF also insists on the obligation to communicate relevant information concerning the key assumptions used and their sensitivity to reasonable changes.

 Concerning IFRS 15 "Revenue from contracts with customers", clear and detailed information must be disclosed regarding performance obligations, determination of the transaction price, including return obligations, methods used to determine the stand-alone selling price and other entity-specific accounting policies. Such disclosures must be provided when it is deemed relevant to allow financial statement users to understand the nature, amount, timing and uncertainty of revenue and of cash flows arising from contracts with customers.

2.2. Sustainability information enforcement

For issuers subject to the obligation to publish sustainability-related information, the 2022 campaign focussed especially on climate-related issues. For the issuers concerned, the CSSF noticed that they all disclosed climate-related information, even though improvements are still needed in the identification process and the assessment of some physical or transition-related risks.

Another important topic was the publication of the first information on eligible activities in the context of Article 8 of Regulation (EU) 2020/852 of 18 June 2020, the so-called Taxonomy Regulation. Here too, efforts are still needed from some issuers in order to comply with the new requirements and to provide relevant information, as expected by the various stakeholders.

2.3. Challenges and priorities for 2023

In 2023, the CSSF will continue to consider the direct financial impacts of the war in Ukraine on the financial statements of the issuers concerned.

More generally, the current macroeconomic environment presents material challenges for issuers and their activities, especially due to rising inflation, interest rates and energy costs. This topic will also be part of the specific points of attention in the next campaign.

The year 2023 also marks a new step in the implementation of the requirements of Article 8 of the Taxonomy Regulation. Indeed, beyond the eligibility of their economic activities, the non-financial issuers will have to communicate qualitative and quantitative information on the alignment of their activities with the planned climate change adaptation and mitigation objectives.

Finally, in the context of financial statements established in the European Single Electronic Format (ESEF), the CSSF will also monitor the way issuers have marked up the notes to their IFRS financial statements using the XBRL tags provided for in the regulatory technical standard on ESEF.

The CSSF recommends that issuers which will be subject to the preparation of sustainability information according to the new Corporate Sustainability Reporting Directive follow the developments regarding the future ESRS standards.

3. Supervision of issuers

In order to guarantee a high level of investor protection, the CSSF notably ensures, in the framework of its mission as competent authority under the Law of 11 January 2008 on transparency requirements for issuers (Transparency Law), that the issuers disclose periodic and ongoing information as required by said law. In this context, the initiatives and projects to improve the structure of information and data continue.

3.1. ESEF requirements

The CSSF continues to monitor the requirements relating to the ESEF format set out in Delegated Regulation (EU) 2019/815 under which issuers are required to prepare their annual financial reports. In this context, the CSSF considers the complexity of the requirements related to this format and concentrates particularly on the awareness raising and guidance of issuers with regard to the applicable requirements. Furthermore, the CSSF intends to focus first on the verification of the issuers required to draw up IFRS consolidated financial statements.

3.2. Filing platform eRIIS

On 4 March 2022, the CSSF launched its online portal eRIIS (electronic Reporting of Information concerning Issuers of Securities), a web application allowing entities subject to the Transparency Law and the Market Abuse Regulation¹ to fulfil a wide range of filing obligations with the CSSF. Thus, eRIIS is not only a system for regulatory filing (allowing for instance to file regulated information under the Transparency Law or diverse publications under the Market Abuse Regulation), but also a secure channel of communication with the CSSF.

In general, the transition to eRIIS has been well accepted by the issuers concerned, which have demonstrated this by taking the necessary steps relatively quickly. Although some instructions were required at times, the issuers adjusted well to the use of eRIIS (including the management of access rights and the granting of access delegation to third parties) as well as the interfacing with the OAM system.

¹ Regulation (EU) No 596/2014 of 16 April 2014 on market abuse

4. Market abuse

4.1. Suspicious transaction and order reports (STORs)

In 2022, the CSSF received 65 suspicious transaction and order reports (STORs) under Article 16 of the Market Abuse Regulation from the market operator and other professionals established in Luxembourg. This number represents a decrease of nine STORs compared to the previous year (74 STORs) which was marked by a particularly high number of STORs due to the introduction by some professionals of (new) automated detection systems. In 2022, almost all the STORs transmitted by Luxembourg professionals concerned suspicions of insider dealing in relation to transactions in equity securities (shares).

Meanwhile, the CSSF received 14 STORs from its foreign counterparties, which concerned, almost equally, suspicions of market manipulation and insider dealing in relation to transactions in equity or debt securities.

In 2022, the CSSF also performed a previously announced thematic review on the STOR obligations of investment fund managers (IFMs). The main observations of this review, which allowed the CSSF to identify a certain number of best practices but which did not reveal any significant weaknesses in this sector, were published in January 2023. In the future, the review of the STOR obligations of IFMs will be further integrated into the various supervisory activities of the CSSF.

4.2. Cooperation and exchange of information with foreign supervisory authorities

In 2022, the CSSF opened around 30 inquiries relating to requests for assistance from its foreign counterparties, mainly under IOSCO's Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information and under the Multilateral Memorandum of Understanding providing a legal framework for cooperation arrangements and exchange of information between competent authorities and ESMA.

The majority of these requests related to inquiries into insider dealing carried out by the requesting foreign authorities. The other requests related either to inquiries into market manipulation or to very diverse subjects (including major holdings).

XIV. Supervision of market infrastructures



1. CSDR and the supervision of central securities depositories

In accordance with Article 1(1) of the Law of 6 June 2018 on central securities depositories and implementing Regulation (EU) No 909/2014 of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories (CSDR), the CSSF is the competent authority in charge of exercising the duties under CSDR for the authorisation and supervision of the central securities depositories (CSDs) established in Luxembourg.

As at 31 December 2022, two entities were authorised in Luxembourg as CSD under CSDR, one of which has an authorisation in accordance with Article 16 of CSDR (provision of core CSD services), and the other one holds the three available CSDR authorisations, i.e. the one under Article 16, the authorisation to maintain an interoperable link under Article 19 of CSDR and the authorisation to provide, under its banking authorisation, ancillary banking services for CSD participants under Article 54 of CSDR. Within the CSSF, the Banking Departments are responsible for the supervision of CSDs (with and without banking authorisation). Regarding the supervision of authorised CSDs, the CSSF must perform at least once a year a review and an evaluation in accordance with Article 22 of CSDR and, in addition, an assessment in accordance with Article 60 of CSDR for the CSD authorised under Article 54 to provide banking services. These annual exercises are combined with the continuous supervisory work under CSDR (as well as under the CRR/CRD for the entity holding a banking authorisation).

In February 2022, the two CSDs authorised in Luxembourg started to submit the monthly reporting of settlement fails as required by Article 7 of CSDR. The reporting was submitted on time and without any major technical issue.

2. EMIR

In the framework of Regulation (EU) 648/2012 of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (European Market Infrastructure Regulation – EMIR), the CSSF contributes, through different ESMA working groups, to the development of implementing measures regarding EMIR and of ESMA publications in order to promote common positions between competent authorities in the application of EMIR¹.

The CSSF is the competent authority in Luxembourg to ensure the compliance with some provisions of EMIR by financial counterparties, except for those subject to the supervision of the Commissariat aux Assurances, and by non-financial counterparties as defined by the Law of 15 March 2016 on OTC derivatives, central counterparties and trade repositories.

The CSSF received 4.5 million reports per day from trade repositories for a total exceeding 1.25 billion transactions in 2022. These reports concerned about 13,000 counterparties established in Luxembourg which were exposed to around one million derivative contracts. The notional amount was about EUR 8,300 billion, which corresponds, based on ESMA estimates, to around 3.4% of the total notional amount of the EEA.

In 2022, ESMA stopped conducting the annual data quality exercises that it coordinated from 2015 to 2021 and in which the CSSF participated every year. The management of data quality has been transferred to the national competent authorities in order to manage it considering the specific risks of national markets. However, ESMA and the authorities have agreed on a coordinated framework for data quality in the case of problems affecting the use of reported data at EU level. In addition, ESMA and the authorities have agreed on a set of 19 indicators to monitor the development of data quality at EU level and to be used as a reference for specific markets. The CSSF has implemented these indicators during 2022 and is using them in the framework of the supervision.

In 2022, the CSSF raised several major data quality issues, mainly related to outliers in quantitative data, reporting counterparties or entities responsible for reporting established in Luxembourg or in other Member States (for funds using the passporting regime and via the national competent authority). Most of the problems could be resolved quickly and, in some cases, even before ESMA or other European data users (e.g. ESRB) raised them. Although data quality problems were identified and dealt with quickly in most cases, they were also identified and reported to the CSSF by data users, thereby exposing the Luxembourg market to data quality problems on several occasions. In some isolated but significant cases, data quality problems have not yet been resolved, and supervisory actions are conducted with respect to these specific counterparties.

Using the CSSF's risk-based approach, some of the main counterparties which are not under the prudential supervision of the CSSF were contacted during the year. The objective was to verify if the data provided through EMIR reporting reflected the real situation of these entities, to establish a relationship to ensure that EMIR is considered by these entities and to monitor compliance with the obligations introduced by EMIR more widely. The CSSF mainly focussed on the obligations relating to the clearing thresholds whose calculations are to be carried out annually by non-financial counterparties that are below the clearing threshold at group level in accordance with Article 10 of EMIR.

Throughout the year, the CSSF also participated in several conferences on EMIR focussing mainly on the new technical standards on EMIR Refit reporting which were published in 2022 and which will be applicable from 29 April 2024.

In 2023, the CSSF intends to pursue its actions by focussing on the improvement of data quality in general and, more particularly, on the preparation for the new reporting regime for 2024.

As regards more specifically the EMIR supervision of credit institutions, see also point 1.8. of Chapter VII "Supervision of banks".

EMIR allows benefiting from intragroup exemptions according to Articles 4(2), 9(1) and 11(5) to 11(10). In 2022, the following notifications were submitted and accepted by the CSSF:

- eight notifications covering 13 counterparty pairs concerning the intra-group exemption from the reporting obligation under EMIR, according to Article 9(1) of EMIR;
- one notification concerning the intragroup exemption from the clearing obligation under EMIR, according to Article 4(2) of EMIR.

No notification concerning the intragroup exemption from the margin exchange obligation under EMIR, according to Article 11 of EMIR was submitted and accepted.

The CSSF received 35 notifications informing that clearing thresholds have been exceeded for financial or non-financial counterparties (FC+ or NFC+), according to the obligations provided for in Articles 4a and 10 of EMIR. This brings the number of counterparties established in Luxembourg that exceed or that have decided not to monitor the clearing threshold to 1,314.

3. Transparency of securities financing transactions

In the framework of Regulation (EU) 2015/2365 of 25 November 2015 on transparency of securities financing transactions and of reuse and amending Regulation (EU) No 648/2012 (Securities Financing Transaction Regulation -SFTR), the CSSF contributes, through different ESMA working groups, to the development of implementing measures regarding SFTR and of ESMA publications in order to promote common positions between competent authorities in the application of SFTR. In accordance with Article 1 of the Law of 6 June 2018 on transparency of securities financing transactions, the CSSF is the national competent authority regarding SFTR for financial counterparties apart from those subject to the supervision of the Commissariat aux Assurances, as well as for non-financial counterparties.

The CSSF received 310,000 reports per day from trade repositories for a total of almost 80 million transactions in 2022. Around 2,500 counterparties established in Luxembourg were concerned by these reports.

In 2022, ESMA stopped conducting the annual data quality exercises that it coordinated in 2021 and in which the CSSF participated. The management of data quality has been transferred to the national competent authorities in order to manage it considering the specific risks of national markets. However, ESMA and the authorities have agreed on a coordinated framework for data quality in the case of problems affecting the use of reported data at EU level. In addition, ESMA and the authorities are preparing a set of approximately 20 indicators to monitor the development of data quality at EU level and to be used as a reference for specific markets. These indicators will be implemented during 2023 by the CSSF and will be used in the framework of the supervision.

In 2022, the CSSF raised major data quality issues with reporting counterparties or entities responsible for reporting established in Luxembourg or in other Member States. Most of them could be resolved quickly.

In 2023, the CSSF intends to pursue its activities in this field, to implement the data quality indicators developed and to continue its data driven supervision of SFTR obligations.

XV. Supervision of information systems



This chapter deals with the supervision of information systems of financial professionals, including mainly credit institutions, investment firms, specialised PFS, payment institutions and electronic money institutions. As regards the specific supervision of support PFS, reference is made to point 3. of Chapter VIII "Supervision of PFS".

1. Major events in 2022 and challenges for 2023

1.1. Digital resilience

The CSSF continued to follow the progress of the European Commission's work on the proposal for a European regulation titled Digital Operational Resilience Act (DORA), published in September 2020. The aim of this ambitious text is to develop a single regulatory and supervisory framework for digital resilience in the financial sector. The proposed measures relate to Information and Communication Technology (ICT) governance, ICT risk management, a harmonised ICT-related incident reporting process, digital operational resilience testing (i.e. advanced intrusion testing simulating real cyberattacks, as for example presented in the TIBER–EU framework), management of risks associated with ICT third-party service providers (in particular through the creation of an oversight framework for designated critical providers) and information sharing. In 2022, the CSSF continued to assist the Ministry of Finance in reviewing the proposal for regulation and suggesting improvements. DORA (Regulation (EU) 2022/2554) was published in the Official Journal of the EU on 27 December 2022, entered into force on 16 January 2023 and will apply as from 17 January 2025.

In November 2022, the European Supervisory Authorities' Joint Committee created a Sub-Committee on Digital Operational Resilience (JC-SC DOR) which is mandated to assist the three European supervisory authorities in fulfilling their policy mandates under DORA and related tasks. The Sub-Committee is also tasked to conduct preparatory work for the gradual development of an effective Union-level coordinated response in the event of a major cross-border cyber incident or related threat that could have a systemic impact on the EU financial sector, as envisaged by the Recommendation of the European Systemic Risk Board (ESRB) of 2 December 2021 on a pan-European systemic cyber incident coordination framework for relevant authorities (ESRB/2021/17). The CSSF is a permanent member of the JC-SC DOR which meets every six weeks. Three working groups have been set up under this Sub-Committee to

deliver the DORA policy mandates which are to be executed in 12-month respectively 18-month timeframes, as well as to work on other deliverables in relation to DORA. The CSSF is represented in each of the three working groups.

To assess the scale of usage of third-party service providers of ICT services by the financial entities and to facilitate the preparation of the deliverables on the oversight framework, the European supervisory authorities launched a preparatory exercise towards the end of 2022 which consisted in collecting data from a sample of financial entities across all jurisdictions. For Luxembourg, 29 financial supervised entities were in the scope. The analysis of the results is ongoing.

The CSSF also continued to follow the European Commission's work on the proposal for a new directive (NIS2) on measures for a high common level of cybersecurity across the Union, repealing Directive (EU) 2016/1148 (NIS1). NIS2 updates the existing legal framework considering the increased digitalisation of the EU internal market, the evolution of cybersecurity threats as well as the findings of the European Commission following its assessment of the implementation of NIS1 in the Member States. NIS2 entered into force on 16 January 2023. The national transposition shall apply from 18 October 2024. The CSSF continues to liaise with the ILR (Institut Luxembourgeois de Régulation) and the HCPN (Haut-Commissariat à la protection nationale) in this respect.

Moreover, the CSSF continued to follow with interest the legal adoption process at EU level of the revised version of the eIDAS Regulation. The last version published on 6 December 2022, currently under final review by the European Parliament and the European Commission, updates the existing text, addressing the challenges posed by its structural deficiencies and its limited implementation, as well as the technological developments since it was adopted in 2014. This European digital identity framework will offer secure and trusted means to authenticate and to exchange qualified data attributes online through an "EU Digital Identity Wallet" (EUDI Wallet) issued by the Member States, and allowing transactions throughout the entire EU. These personal digital wallets will allow citizens to digitally identify themselves, store and manage identity data and official documents in an electronic format. The revised regulation also introduces new trusted services, such as electronic archiving and

electronic ledger. In February 2023, the European Commission already published the first version of a common EU toolbox to implement the EUDI Wallet.

In 2022, the CSSF, together with the BCL, started to oversee the first TIBER tests conducted in Luxembourg under the TIBER-LU framework that was adopted in 2021¹. In the area of cybersecurity, the CSSF has also been in contact throughout the year with its peers to share information on the level of threats.

In 2023, the CSSF will continue to follow the development and be actively involved in the important ongoing European projects mentioned above. It will work towards proper awareness, understanding and implementation of the current requirements relating to ICT and security risk management, and continue to oversee, with the BCL, the TIBER tests conducted in Luxembourg.

Aware of the potentially disruptive impact of new technologies (AI², DLT³, etc.) applied to the financial industry, the CSSF will continue to carry out a technology watch to keep abreast of the developments in these areas and to support the financial sector, as far as possible, on these topics. This technology watch will notably include meeting and exchanging with entities involved in projects using these new technologies or participating in national and European working groups focussing on these topics. The resulting discussions and opinions will complement the work of the departments in charge of the entities' prudential supervision and of the Innovation Hub (see also Chapter V "Financial innovation").

1.2. PSD2 requirements relating to payment security and access to payment accounts

The regulatory technical standards (RTS) for strong customer authentication (SCA) and common and secure open standards of communication entered into force in September 2019. A proposal for an amendment to the RTS, in relation to the exemption defined under Article 10, was submitted to the European Commission which proposed

¹ www.cssf.lu/en/2021/11/tiber-lu/

² www.cssf.lu/en/Document/white-paper-artificial-intelligenceopportunities-risks-and-recommendations-for-the-financialsector/

³ www.cssf.lu/en/Document/white-paper-distributed-ledgertechnologies-dlt-and-blockchain/

changes that did not constitute major changes in content. After the scrutiny period by the European Parliament and the Council, this amendment to the RTS was published in December 2022 and will come into force on 25 June 2023.

Concerning the interfaces for access to payment accounts by third-party payment service providers, the EBA published, on 4 June 2020, an opinion to clarify whether certain market practices constitute obstacles to the provision of services by third-party providers under PSD2. As some obstacles required a substantial modification of the underlying IT systems, the CSSF monitored, in 2022, the proper implementation of the resolution plans of the institutions concerned to finalise compliance of their interfaces with the EBA opinion. The CSSF also participated in EBA working groups which developed proposals for the revision of PSD2. These proposals were submitted mid-2022 to the European Commission, which then launched a public consultation on the subject. The European Commission's legislative proposal for the revised PSD (PSD3) is expected in the third quarter of 2023.

1.3. Adaptation of the CSSF expectations and practices as regards IT outsourcing

In 2021, the CSSF initiated the gradual adaptation of its IT risk supervision strategy. In April 2022, Circular CSSF 22/806 on outsourcing arrangements was published presenting all the CSSF expectations on any type of outsourcing, including IT outsourcing, in a single text and moving from a prior authorisation obligation towards a prior notification obligation for the large majority of critical or important outsourcing arrangements. As part of this adaptation, new templates have been released in 2022 and early 2023 (by the CSSF and the ECB). The internal procedures of the CSSF have also been adapted to ensure a more risk-based processing of these notifications.

In 2023, the CSSF will continue to implement additional tools and means supporting its strategy and to provide feedback to the supervised entities, for example by publishing additional FAQ on its website.

1.4. Adaptation of the incident reporting framework

In 2022, the CSSF continued to analyse and follow up on ICT-related incident notifications received from financial entities and started working on a revision of Circular CSSF 11/504 on frauds and incidents due to external computer attacks.

In 2023, the incident reporting framework will be modified to allow collecting more structured and comprehensive information on ICT-related incidents to be submitted via a new dedicated portal.

2. Supervision of information systems in practice

Supervision includes verifying that supervised entities comply with the legal and regulatory framework, with the direct (or indirect) aim of maintaining or improving the activities' professionalism, focussing on the technologies implemented as part of the information systems. This implies considering the specific nature of the outsourcing of services to support PFS or third parties, within or outside the group.

In the context of the off-site supervision of the information systems, the CSSF processed 433 requests in 2022, i.e.:

- a total of 38 applications for authorisation or for the extension of authorisation (IT-related part) for different types of entities (credit institutions, electronic money institutions, payment institutions, PFS);
- a total of 395 requests for advice or authorisation or notifications relating to IT projects submitted by supervised entities (most of them concerned outsourcing, remote access, security of online services or major system changes) and specific IT issues (for example critical items of a management letter from a réviseur d'entreprises agréé (approved statutory auditor)).

About 35% of the requests for advice or authorisation originated from credit institutions, and 30% (an increase compared to 2021) from investment fund managers.

As regards the on-site supervision of the information systems, the on-site inspections aiming to cover the IT risk are described in more detail in point 1.12. of Chapter XVIII "Instruments of supervision".

XVI. Supervision of the remuneration policies



The CSSF ensures compliance with the requirements regarding governance and remuneration in the financial sector. The procedures and arrangements implemented by the entities with respect to remuneration form an integral element of robust internal governance arrangements which ensure that risks are managed in an efficient and lasting manner. In 2022, the CSSF thus continued to carry out reviews in order to ensure compliance with the legal and regulatory requirements applicable to remuneration policies and practices.

The revised EBA guidelines and the new EBA guidelines issued following the adoption of the regulatory packages CRD V/CRR2 and IFD/IFR are now applicable to credit institutions and investment firms, respectively, as follows:

 the guidelines on sound remuneration policies (EBA/GL/2021/04), the guidelines on internal governance (EBA/GL/2021/05) and the guidelines on the assessment of the suitability of members of the management body and key function holders (EBA/GL/2021/06) are applicable to credit institutions since 31 December 2021; • the guidelines on sound remuneration policies (EBA/GL/2021/13) and the guidelines on internal governance (EBA/GL/2021/14) are applicable to non-SNI IFR investment firms since 30 April 2022.

The new Delegated Regulation (EU) 2021/923 relating to the identification of material risk takers and supplementing Directive 2013/36/EU is applicable since 14 June 2021 and to be read jointly with Article 38–5(2) of the Law of 5 April 1993 on the financial sector. The new Delegated Regulation (EU) 2021/2154 relating to the identification of material risk takers and supplementing Directive (EU) 2019/2034 is applicable since 12 December 2021.

The following guidelines were revised and are applicable since 31 December 2022:

- the revised guidelines on the benchmarking exercises on remuneration practices, the gender pay gap and approved higher ratios under Directive 2013/36/EU (EBA/GL/2022/06);
- the new guidelines on the benchmarking exercises on remuneration practices and the gender pay gap under Directive (EU) 2019/2034 (EBA/GL/2022/07);

 the revised guidelines on the data collection exercises regarding high earners under Directive 2013/36/EU and under Directive (EU) 2019/2034 (EBA/GL/2022/08).

The CSSF pursued its annual benchmarking exercise of the remuneration practices at national level. In this context, it noted that the credit institutions distributed variable remunerations at a similar level to the previous years, amounting, on average, to 45% of the fixed component of the remuneration in 2022 for performance year 2021 (against 44% in 2021 and 2020), that the proportion of the variable remuneration paid out in financial instruments amounted to 40% on average (against 40% in 2021 and 38% in 2020) and that the deferred part of variable remuneration amounted, on average, to 39% (against 35% in 2021 and 32% in 2020), showing a positive trend in the sound and effective management of risks.

In 2022, the CSSF continued receiving higher ratio notifications from credit institutions for the purpose of paying variable remuneration exceeding 100% of the fixed component. In this context, it noted improved compliance with the requirements, notably with respect to the responsibility of the management body in its supervisory function and the quality of the documentation provided to shareholders. Indeed, the recommendations to shareholders, justifying the higher ratios, include more elements relating to the assessment of the persons concerned based on qualitative and quantitative criteria. The CSSF continues ensuring compliance with the procedure set out in point g) of Article 38-6(1) of the Law of 5 April 1993 on the financial sector and clarified in Circular CSSF 15/622 and encourages credit institutions to pursue their efforts in that direction.

Moreover, the CSSF will pursue its efforts to ensure compliance with the remuneration requirements through targeted reviews on selected topics, notably relating to the gender neutrality of remuneration policies. Finally, in 2022, the CSSF contributed again in the EBA's periodic benchmarking exercise of diversity practices and the gender pay gap at the level of the management body. The data collected for Luxembourg, covering a sample of 26 credit institutions and 10 non-SNI IFR investment firms, revealed non-compliance with the following requirements:

- 30% of the credit institutions and 50% of the non-SNI investment firms included in the sample do not have a diversity policy in place;
- where quantitative targets have been set, they are generally not ambitious enough and rarely associated with a target deadline;
- in general, criteria other than gender are not taken into account in the existing diversity policies.

In this respect, the CSSF will not only monitor the failures identified for the entities concerned, but will also take targeted supervisory actions, notably for the other credit institutions under its supervision. These actions could, in particular, concern the review of the diversity policy to verify its compliance with the requirements. Special attention will also be paid to the way the institutions have put into practice these policies in the recruitment process for members of the management body. XVII. Public oversight of the audit profession



1. European cooperation

Established by Regulation (EU) No 537/2014, the CEAOB (Committee of European Auditing Oversight Bodies) is the framework for cooperation between the different public audit oversight authorities in the EU. Among its members are the representatives of the European national competent authorities, the European Commission and ESMA. Representatives of the EEA national authorities also participate in the meetings, as well as the EBA and EIOPA as observers.

The CSSF is an active member of the CEAOB. It is represented notably within the consultative group which assists the chairperson of the CEAOB with the coordination of the work, chairs the sub-group relating to inspections and is a member of the other sub-working groups and of the regulatory colleges for the "Big 4".

1.1. Specific activities relating to current topics

The CEAOB anticipated the possible impacts that certain European developments could have on the audit profession and its supervision:

- by issuing a recommendation for third-country audit entities whose clients are issuers subject to the obligation to draw up financial statements in the European Single Electronic Format (ESEF). In this context, the third-country auditors are invited to provide an opinion on the compliance with the ESEF requirements of the financial statements included in the annual financial report of these issuers. In the absence of audit standard(s) dealing specifically with ESEF reporting applicable throughout the EU, the CEAOB recommends third-country auditors to use the CEAOB ESEF guidelines.
- by committing to support the development of the European Sustainability Reporting Standards (ESRS), the implementation of which will need to be verified by assurance providers before issuing their opinion. The CEAOB thus issued comment letters addressed to EFRAG in April 2022 on the first draft standards and to the European Commission in January 2023 following the publication of the first set of standards by EFRAG in November 2022.

 by participating, at the request of the European Commission, in a consultation of the European financial sector supervisory authorities on the sharing and reuse of data relating to supervised entities. In its response, the CEAOB stresses that there are obstacles to the exchange of information between the CEAOB or its members and the European or national competent authorities in the financial sector. It also stresses that the foreseeable increase in data volume to be processed in the future by regulators should be taken into account for any future development of the European regulatory framework in order to allow both European and national authorities to efficiently share these data.

More detailed information is available on the website of the CEAOB¹.

1.2. Comment letters relating to standard setting proposals

The CEAOB provided the point of view of the European audit regulators on the following topics:

- IAASB Exposure Draft, Proposed ISA for Audits of Financial Statements of Less Complex Entities (ISA for LCE) (January 2022);
- IESBA Exposure Draft, Proposed Revisions to the Code Relating to the Definition of Engagement Team and Group Audits (May 2022);
- IESBA Exposure Draft, Proposed Technology-Related Revisions to the Code (June 2022);
- IAASB Narrow Scope Amendments to ISA 700 (Revised) "Forming an opinion and reporting on financial statements" and ISA 260 (Revised) "Communication with those charged with governance" (October 2022).

1.3. Other publications

In 2022, the CEAOB also published:

 the Common Audit Inspection Methodology on the new standards on quality management for audit firms (ISQM);

- two infographics relating to the findings during inspections regarding ISA 330 "The auditor's responses to assessed risks" and ISA 600 "Audits of group financial statements";
- the report presenting the results of its thematic review on materiality in the context of an audit;
- the 6th report on the statistical and qualitative study of the activity of the CEAOB members with respect to investigations and sanctions.

2. Legal, regulatory and normative framework of the audit profession

The transposition regarding Directive (EU) 2022/2464 of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting, will start in 2023. This directive will notably amend the Law of 23 July 2016 concerning the audit profession by assigning a new mission to *réviseurs d'entreprises agréés* (approved statutory auditors) and *cabinets de révision agréés* (approved audit firms), namely that of expressing an opinion based on a limited assurance engagement which could become, in the future, a reasonable assurance engagement:

- on the compliance of the sustainability reporting with the sustainability reporting standards to be adopted by the European Commission;
- on the process carried out by the undertaking to identify the information reported pursuant to those sustainability reporting standards;
- on the compliance with the requirement to mark up sustainability reporting;
- on the compliance of the undertaking's reporting with the reporting requirements of Article 8 of Regulation (EU) 2020/852.

https://ec.europa.eu/info/business-economy-euro/bankingand-finance/regulatory-process-financial-services/expertgroups-comitology-and-other-committees/committeeeuropean-auditing-oversight-bodies_en

The European Commission should adopt limited assurance standards by 1 October 2026.

In order to perform this engagement, *réviseurs d'entreprises agréés* and *cabinets de révision agréés* will have to obtain a specific approval for the assurance of sustainability reporting in addition to the approval to carry out statutory audits. The engagement will be subject to public oversight through quality assurance reviews.

3. Quality assurance review

3.1. Scope

By virtue of the Law of 23 July 2016 concerning the audit profession (Audit Law), *réviseurs d'entreprises agréés* and *cabinets de révision agréés* are subject to a quality assurance review of the audit engagements, organised according to the terms laid down by the CSSF in its capacity as oversight authority of the audit profession.

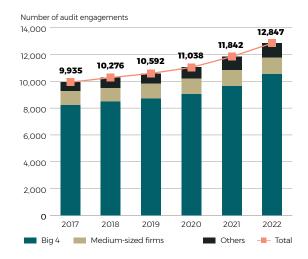
The population of *cabinets de révision agréés* and *réviseurs d'entreprises agréés* that carry out statutory audits was as follows as at 31 December 2022:

- 53 cabinets de révision agréés, 10 of which audit PIEs²;
- 4 independent réviseurs d'entreprises agréés, none of which audits PIEs.

Based on the data collected through the "Annual Annexes" for the year 2022, the audit engagements break down as follows between *cabinets de révision agréés* and independent *réviseurs d'entreprises agréés*:

- 82% of the audit engagements were carried out by the "Big 4"³;
- 10% of the audit engagements were carried out by medium-sized audit firms⁴;
- 8% of the audit engagements were carried out by the other audit firms and independent *réviseurs*.

Development of market share in statutory audit⁵



2 Public-interest entity

³ PwC, KPMG, Deloitte, EY

⁴ Firms that carry out over 100 audit engagements (as at 31 December 2022, three firms are concerned)

⁵ Source: "Annual Annexes" collected by the CSSF

3.2. Activity programme for 2022

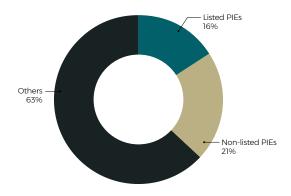
The CSSF set down a multiannual programme for the control of *cabinets de révision agréés/réviseurs d'entreprises agréés* which aims at observing the legal quality assurance review cycle, being three years for firms that audit PIEs and six years for the other ones. This programme is based on the information transmitted by firms and *réviseurs* through the "Annual Annexes" relating to their activity.

Under the 2022 programme, one independent *réviseur* and 12 firms were reviewed, seven of which audit PIEs and eight are members of an international network. The quality assurance reviews focussed on:

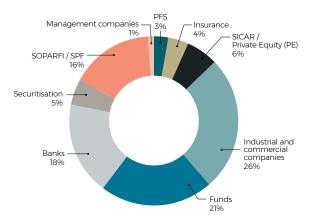
- the understanding and documentation of the organisation, policies and procedures established by the reviewed firms in order to assess compliance with the International Standard on Quality Control (ISQC1);
- the review of a sample of audit files relating to audit engagements of the financial years 2022, 2021 and 2020 (or 2019, 2018, where appropriate);
- the completion of a specific follow-up for professionals for which material weaknesses were noted in the previous financial years.

The independent *réviseur* and the 12 audit firms reviewed reported⁶ a total of 10,374 audit engagements, including 408 in relation to PIEs. Under the 2022 review programme, 172 mandates were reviewed, 63 of which concerned PIEs.

The quality assurance reviews started in January 2022 and were carried out by 10 CSSF inspectors with professional audit experience and expert knowledge in the business areas of the financial centre. These reviews represented a total of 9,482 hours. Breakdown of audit files reviewed by the CSSF in 2022 per entity type



Breakdown of audit files reviewed by the CSSF in 2022 per sector



It should be noted that for the investment fund sector files, a specific inspection was implemented in addition to the individual review of the audit files. This inspection consists notably of on-site inspections within the firms in relation to the independent valuation processes of portfolio securities and derivative financial instruments.

⁶ Based on the statements of *cabinets de révision agréés* as at 31 December 2022

3.3. Conclusions of the 2022 quality assurance review campaign

Among the 13 reviews, the CSSF carried out a specific follow-up of 10 *réviseurs d'entreprises agréés* due to previous campaign conclusions. The specific follow-up was maintained for two of them.

For the 2022 campaign (specific follow-ups excluded), the following conclusions were transmitted to the *réviseurs d'entreprises agréés* in the context of eight inspection reports already issued:

- a training plan was given to one réviseur d'entreprises agréé;
- four réviseurs d'entreprises agréés were subject to a specific follow-up.

3.4. Major issues identified during the quality assurance reviews of 2022

3.4.1. Review of quality management systems

In 2022, the CSSF continued its discussions with different *cabinets de révision agréés* on the implementation of ISQM1, which entered into force on 15 December 2022, in order to identify the issues relating to its implementation.

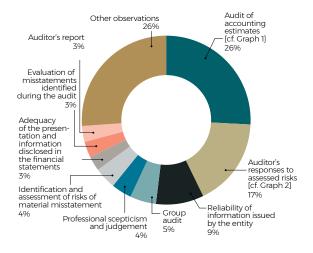
In 2023, the CSSF will start analysing this implementation in the different firms reviewed by examining their risk assessment process in order to ensure that the quality objectives have been established, that the quality risks have been identified and assessed and that responses have been put in place to address these risks. The CSSF will take into account the flexibility of the standard which provides that the processes must be adapted depending on the circumstances and the nature of the engagements carried out by the firm.

3.4.2. Audit files

Despite the efforts made by the *cabinets de révision agréés* to improve their audit quality, the results of the quality assurance reviews of 2022 revealed a slight deterioration compared to the previous year. Recent events combined with real challenges relating to human resources management are all obstacles to achieve the objective.

The cabinets de révision agréés must ensure, despite a lack of resources, that the audit files provide evidence that support the professional judgements and allow demonstrating that the audit was planned and carried out in accordance with the ISA standards and with the applicable legal and regulatory requirements.

The following graphs summarise the observations made during the 2022 quality inspections.

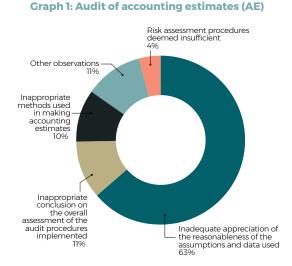


As in the previous years, the main observations relate to failures with respect to ISA 540 (Audit of accounting estimates) (graph 1) and to ISA 330 (The Auditor's responses to assessed risks) (graph 2).

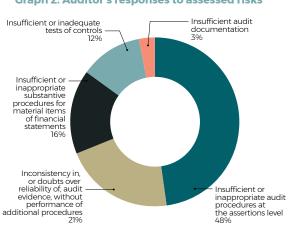
Main observations issued on the files

The less frequent observations are grouped in the category "Other observations". They notably relate to the following standards:

- Using the work of an expert appointed by the auditor;
- Auditor's responsibilities relating to fraud in an audit of financial statements;
- Initial audit engagements;
- Communication with those charged with governance;
- Engagement quality control.



Audit of accounting estimates, especially in times of economic crisis where the uncertainty linked to the assumptions made about the future is more important and the reliability of audit evidence potentially weaker, is still a challenge for auditors. Auditors should use professional scepticism when challenging the methods, assumptions and data selected by the entity's management. As part of the overall assessment, auditors should document in the audit file the significant judgements made in determining whether accounting estimates and relating disclosures are reasonable under the applicable accounting framework or are misstated.



ISA 330 "The auditor's responses to assessed risks" requires that auditors design and perform audit procedures to respond to the identified risks of material misstatement at the assertions level. The CSSF's controls have again highlighted the insufficient and/or inappropriate nature of the audit procedures performed.

The CSSF expects the changes introduced by the revised ISA 315, applicable as from financial years beginning on or after 15 December 2021, to improve this finding. By enhancing the process of identifying and assessing the risks of material misstatement, the design and execution of the auditor's responses to the assessed risks should become more relevant.

Graph 2: Auditor's responses to assessed risks

4. Overview of the population of *réviseurs d'entreprises* in Luxembourg

4.1. Access to the profession

4.1.1. Activities of the Consultative Commission for the Access to the Audit Profession

The Consultative Commission's task is, among others, to verify the theoretical and professional qualification of the candidates for the access to the audit profession in Luxembourg, as well as that of the service providers from other Member States wishing to exercise the activity by way of free provision of services.

The Commission met seven times in 2022 and analysed the files of 100 candidates, against 97 in 2021.

In 2022, access to training was refused to 10 candidates (10%) as the number of subjects to be completed based on their administrative certificate was greater than four.

There are three categories of candidates:

- trainee réviseurs d'entreprises;
- foreign candidates;
- candidates applying for an exemption based on their professional experience of either 7 or 15 years.

Development in the number of application files submitted to the Consultative Commission



81% of the candidates come from the "Big 4" firms. As regards nationality, most of the candidates come from France (34%), followed by Belgium (14%), Luxembourg (10%) and Germany (6%). The remaining 36% originate from various other countries.

4.1.2. Examination of professional competence in 2022

The CSSF administrates the examination of professional competence in accordance with Articles 5 and 6 of Grand-ducal Regulation of 14 December 2018 determining the requirements for the professional qualification of *réviseurs d'entreprises*.

Based on the decision of the examination jury, the CSSF granted the title of *réviseur d'entreprises* to 24 out of the 57 candidates registered for the written and oral exams of the examination of professional competence.



Graduation ceremony

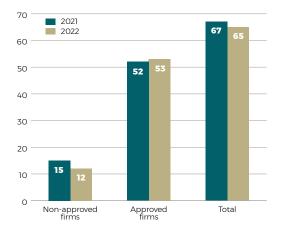
4.2. Public register

The public register of *réviseurs d'entreprises agréés*, *cabinets de révision agréés* and third-country auditors and audit entities is available on the CSSF website (https://audit.apps.cssf.lu).

4.2.1. National population as at 31 December 2022

• Development in the number of *cabinets de révision* and *cabinets de révision agréés*

The total number of *cabinets de révision* and *cabinets de révision agréés* amounted to 65 as at 31 December 2022, against 67 as at 31 December 2021.



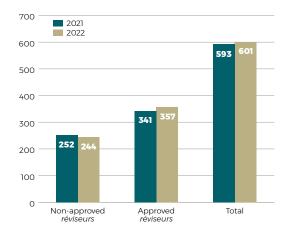
The following firm was approved in 2022:

• CELIANCE.

In 2022, two firms gave up their title of *cabinet de révision*.

• Development in the number of réviseurs d'entreprises and réviseurs d'entreprises agréés

The total number of *réviseurs d'entreprises* and *réviseurs d'entreprises agréés* amounted to 601 as at 31 December 2022, against 593 as at 31 December 2021.



In 2022, the CSSF granted the title of *réviseur d'entreprises* to 32 people and approved 30 *réviseurs d'entreprises.*

During the year under review, 14 *réviseurs d'entreprises* gave up their approval.

The population consists of 68% men and 32% women. The average age of the *réviseurs* is 45.34 years for women and 46.62 years for men.

• Development in the number of candidates for the audit profession

The total number of trainee *réviseurs d'entreprises* amounted to 65 as at 31 December 2022, against 68 as at 31 December 2021, which represents a 5% decrease. This population consists of 65% men and 35% women. The average age is 30.38 years for women and 29.95 years for men.

The number of candidates exempted based on their professional experience of either 7 or 15 years in the financial, legal and accounting areas amounted to 197 as at 31 December 2022, against 178 as at 31 December 2021, i.e. an 11% increase. This population consists of 71% men and 29% women. The average age is 35.49 years for women and 37.24 years for men.

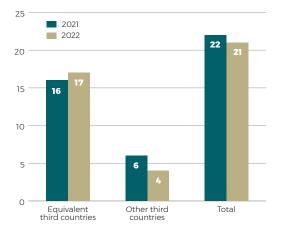
75% of the population of candidates for the access to the audit profession comes from the "Big 4" firms.

4.2.2. Third-country auditors and audit firms

The number of third-country auditors and audit entities that provide an auditor's report on the annual or consolidated financial statements of a company incorporated outside an EU Member State, whose securities are admitted to trading on the regulated market of the Luxembourg Stock Exchange, decreased by one entity in 2022. This decrease is due to the non-renewal of the registration of two audit entities, which was partially offset by the registration of one entity whose activities fell under the scope of the amended Directive 2006/43/EC.

The public register listing all registered third-country auditors is available on the CSSF website.

Breakdown of registered third-country auditors



5. Cooperation agreements

In 2022, the CSSF and its US counterpart, the Public Company Accounting Oversight Board (PCAOB), signed a new Statement of Protocol with the purpose of facilitating cooperation with respect to the oversight of audit firms subject to their joint supervision.

In parallel to the signature of this new protocol, both authorities also signed an agreement on the transfer of certain personal data. Prior to its signature, the agreement had been given a positive opinion of the European Data Protection Board (EDPB) and an approval of the National Commission for Data Protection (CNPD).

The cooperation agreements concluded by the CSSF are available on its website.

XVIII. Instruments of supervision



1. On-site inspections

The "On-Site inspection" (OSI) department is in charge of coordinating all on-site inspections conducted by the CSSF with regard to banks¹, payment institutions, electronic money institutions, UCIs as well as their management companies, investment firms, specialised PFS, support PFS, pension funds, securitisation undertakings, virtual asset service providers and financial market participants. Moreover, the OSI department coordinates the on-site inspections at Luxembourg significant banks with the "On-site & Internal Models Inspections" department of the ECB. It should be noted that, besides the OSI department, other CSSF departments also carry out targeted on-site inspections.

On-site inspections are in-depth investigations which provide a better understanding of the functioning and activities of the supervised entities and allow the assessment of the risks to which these entities are exposed and their compliance with the laws and regulations. In general, on-site inspections are proposed, on an annual basis, by the supervisory departments which have developed a risk-based approach in this field to determine which professionals must undergo an on-site inspection. Subsequently, an annual planning is established and validated by the Executive Board of the CSSF. Any change, insertion or deletion in this annual planning must be subject to a formal validation.

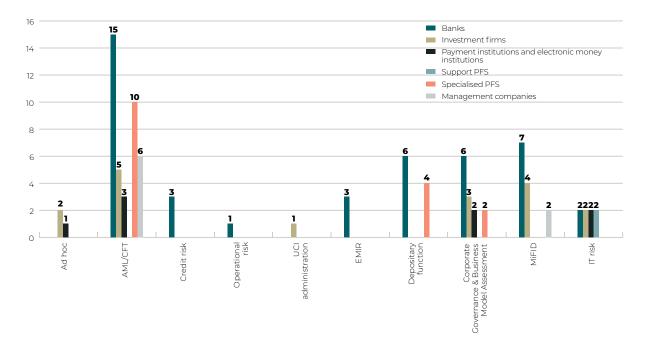
In order to fulfil all its tasks, the OSI department's staff remained stable with 81 people representing 77.7 full-time equivalents as at 31 December 2022. A team composed of eight people representing 7.1 full-time equivalents of the "Supervision of information systems and support PFS" department, specialised in on-site IT audit, has to be added to this figure.

The teams in charge of on-site inspections² are set up based on the nature, scale and scope of the missions and generally involve the participation of agents of an OSI department and, in certain cases, off-site supervisory departments.

After each on-site inspection, the team in charge draws up an internal report on the controls

This includes on-site inspections of less significant banks which are not directly subject to the SSM as well as AML/CFT, MiFID, Depositary bank, UCI administration function and EMIR on-site inspections of significant and less significant banks as these topics are not directly covered by the SSM.

² With the exception of the missions performed at significant banks which are organised according to the methodology of the ECB.



Breakdown of the on-site inspections carried out in 2022 by topic and type of entity (excluding UCI departments)

performed and on the weaknesses identified during the on-site inspection. The observations are then shared with the inspected entities during a fact validation meeting. Generally, on-site inspections are followed by an observation letter that is sent to the inspected entity. In the event of more serious failures, the CSSF analyses whether it needs to launch an injunction procedure or a non-litigious administrative procedure in order to impose an administrative sanction pursuant to the sectoral laws in force. The administrative sanctions and prudential enforcement measures are described in detail in point 2. of this chapter.

The entry into force of the Grand-ducal Regulation of 23 December 2022 relating to the fees to be levied by the CSSF did not change the lump sum billed for every on-site inspection relating to a specific topic. This lump sum amounts to EUR 25,000 for banks, to EUR 10,000 for the other entities and to EUR 1,500 for agents acting on behalf of a payment institution or electronic money institution.

In 2022, 140 on-site inspections were conducted by the CSSF departments. Forty-six of these missions were performed by the UCI departments and are described in point 4.3. of Chapter X "Supervision of investment fund managers and UCIs". The other 94 missions are detailed hereafter.

1.1. Ad hoc on-site inspections

Ad hoc on-site inspections are intended for the investigation of a given situation or a specific, or even worrying, issue related to the professional. Often, this particular situation of the professional has already been observed in the context of the off-site prudential supervision. Such missions may either be planned in advance or occur unexpectedly. The nature and scale of ad hoc inspections may vary significantly and, consequently, determine the composition and size of the on-site inspection teams.

In 2022, three ad hoc on-site inspections were performed. In addition, one ad hoc mission which had started in 2021 continued in 2022. They concerned, in particular, governance and anti-money laundering and countering the financing of terrorism issues. The ad hoc team also supported one "MiFID" on-site inspection.

1.2. "Anti-money laundering and countering the financing of terrorism" (AML/CFT) on-site inspections

AML/CFT on-site inspections are described in detail in point 1.2. of Chapter XXII "Financial crime" which relates more particularly to the CSSF's supervision with respect to AML/CFT.

1.3. "Credit risk" on-site inspections

The purpose of "Credit risk" on-site inspections is to verify the soundness and prudence of credit risk management within credit institutions. They are performed based on the methodology covering the credit risk prepared by the ECB.

In 2022, the CSSF carried out three "Credit risk" missions at three less significant banks and three missions at significant banks in the framework of the SSM, including one abroad. Two of those missions were still ongoing at the beginning of 2023.

The missions covered various subjects such as corporate banking loans, commercial real estate loans, loans to small and medium-sized enterprises and lombard loans.

The CSSF noted deficiencies in the corporate credit granting process, mainly due to the lack of an independent credit analysis by the risk control function covering, notably, the creditworthiness of the borrower. Moreover, when being chair of the credit committee, the head of the risk control function could be wrongly considered as co-approver of credit decisions.

As regards credit monitoring, the CSSF identified the following deficiencies:

- significant delays;
- lack of formalisation;
- no update of the creditworthiness analysis based on new financial information;
- incorrect or impossible monitoring of financial covenants.

The CSSF also noted deficiencies relating to the management of defaulted or forborne exposures as well as to the prudential/IFRS 9 classification process:

- erroneous or fragmented implementation of the regulatory framework on forborne exposures and often incomplete reporting of these forborne exposures;
- qualitative and quantitative indicators for stage 2 and 3 classification missing, unclear or not based on measurable and discriminating criteria;
- non automated identification of exposures over 90 days past due;
- exit of the classification in default without prior analysis and application of a three-month test period;
- missing, erroneous, incomplete indicators of unlikeliness to pay; those indicators were also not aligned with the regulatory framework and not specific to the credit portfolio;
- for the distressed restructuring indicator of unlikeliness to pay, the calculation of the net present value (NPV) of cash flow is either not performed in the case of a diminished financial obligation or wrongly computed so that it never results in a diminished financial obligation.

For lombard loans, the following weaknesses were identified:

- margin calls triggered where the market value of the pledged assets was insufficient although this should be the case as soon as the value of pledged assets after haircuts is insufficient;
- absence of reaction to margin calls that have not been responded to within the deadlines laid down in internal procedures, and internal deadlines sometimes longer than observed market practices;
- lack of follow-up and procedural framework for deadline extensions of margin calls;
- incomplete or deficient diversification rules for pledged assets with insufficient, inconsistent and not frequent enough monitoring;

• insufficient periodic control of the determination of haircuts on assets.

Furthermore, the CSSF observed that the SICR (Significant Increase in Credit Risk) assessment was, in certain cases, based on an internal credit rating notching approach (downgrade by two or three notches) without analysing the limitations of this approach, while the change in PD (Probability of Default) for a one-grade movement may not be linear.

As regards the ECL (Expected Credit Loss), the CSSF observed that the approach for calculating the ECL was sometimes too simplistic, with standard PD and LGD (Loss Given Default) parameters without economic or statistical justification. As regards the ECL model, it also noted:

- absence of back testing or validation;
- non application of the discount factor, failure to include a probability-weighted amount for the ECL estimates and absence or incomplete incorporation of forward-looking information;
- too simplistic approach to the LGD (non incorporation of time-to-sale or redemption costs, statistical under-estimation of the LGD, use of the LGD not reflecting passed experiences);
- application of the SICR at the level of credit tranches instead of the level of facilities, entailing an under-estimation of the ECL in stage 2;
- absence of model review by independent parties.

Moreover, following the review of a sample of credit files, the CSSF requested several reclassifications in forborne and stage 3/default with the application of additional provisions and related probation periods.

Finally, during an on-site inspection, the CSSF noted deficiencies in the calculation of the amount of risk-weighted assets (RWA) including some that should have been considered as presenting a particularly high risk with the application of a 150% weight.

1.4. "Operational risk" on-site inspections

"Operational risk" on-site inspections, excluding internal models, aim to verify how operational risk is identified, controlled, managed and measured by credit institutions. They also include outsourcing-related inspections. They are performed based on the methodology covering operational risk prepared by the ECB.

In 2022, the CSSF carried out one mission on operational risk at a less significant bank. The following shortcomings were identified:

- absence of a harmonised definition of operational risk leading to the coexistence of several risk taxonomies;
- absence of systematic quantification of operational risk based on concrete and relevant elements.

1.5. "ICAAP" on-site inspections

The purpose of "ICAAP" on-site inspections is to verify that the bank has set up an appropriate process to maintain an adequate level of capital in order to ensure continuity of commercial operations, that it integrates its ICAAP into its business and risk management processes and that it calculates the appropriate level of capital in the normative and economic perspectives, reflecting its risk profile, including adequate stress tests.

In 2022, the CSSF carried out one such mission at a significant bank abroad in the framework of the SSM.

1.6. "Pillar 1" on-site inspections

"Pillar 1" on-site inspections aim to verify the correct application of the requirements for the calculation of own funds with respect to the regulatory reporting as provided for in the CRR.

In 2022, the CSSF carried out one such mission at a significant bank abroad in the framework of the SSM.

1.7. "Depositary" on-site inspections

In 2022, the CSSF conducted 10 on-site inspections regarding the depositary function: six at banks and four at specialised PFS.

In the framework of these inspections, the CSSF verified whether the supervised entities carry out the depositary function in compliance with the existing laws and regulations. The on-site inspections covered, in particular, the procedures and controls implemented to ensure the safekeeping of the different types of assets, the due diligence processes with respect to the different types of parties involved in the safekeeping of assets, respectively in the management of UCIs, the process of acceptance of new depositary mandates, the monitoring of the delegated activities as well as the specific oversight duties. The CSSF reiterates that the depositary must act independently and in the interest of the investors.

The CSSF identified several significant weaknesses in the ownership verification for the other assets which had not yet been carried out in a fully formalised, rigorous and systematic manner. The CSSF insists on the fact that in the context of investments in alternative asset classes, the depositary must ensure that the AIFM establishes and applies appropriate procedures to verify that the assets acquired by the AIF that it manages are properly recorded in the name of the AIF and to verify the correlation between the positions shown in the records of the manager and the assets for which the depositary is satisfied that the AIF holds the ownership of such assets. The manager, for its part, must ensure that all instructions and relevant information related to the AIF's assets are sent to the depositary, so that the depositary is able to perform its own verification or reconciliation procedures. The depositary must therefore verify that it possesses sufficient and reliable information for it to be satisfied of the AIF's ownership right over the assets.

As regards the specific oversight duties, the CSSF noticed, again, that the supervision of tasks under the direct responsibility of the management of the UCIs was still not carried out through a risk-based approach, for both the due diligence process of the different parties involved in the UCI management and the permanent control processes. Moreover, as regards more particularly the obligations relating to the valuation of units or shares, the depositary must verify on an ongoing basis that appropriate and consistent procedures are established and applied for the valuation of the UCI's assets and must ensure that the valuation policies and procedures are effectively implemented and periodically reviewed.

For specialised PFS acting as depositaries of assets other than financial instruments, the CSSF still noted certain deficiencies in their internal control system as well as at the level of their technical and human resources allocated to the realisation and documentation of their tasks. In addition, the shortcomings identified in the preceding paragraphs have also been observed for these market players.

1.8. "UCI administration" on-site inspections

The purpose of "UCI administration" on-site inspections is to ensure the proper implementation of the obligations arising from Circular IML 91/75 (Chapter D), which was recently replaced by Circular CSSF 22/811 on the authorisation and organisation of entities acting as UCI administrators.

At the end of 2022, the CSSF started an on-site inspection in this context at an investment firm the assessment of which is still ongoing.

1.9. "Corporate governance" on-site inspections

"Corporate governance" on-site inspections aim to assess the quality of the governance arrangements set up by the supervised entities pursuant to the legal and regulatory requirements. Thus, may be subject to such an inspection: the internal governance arrangements as a whole, the "head of group" function carried out by a Luxembourg entity over its subsidiaries or branches, the organisation and efficiency of the internal control functions of an entity, the remuneration policies or the outsourcing organisation.

In 2022, the CSSF carried out 13 "Corporate governance" on-site inspections at credit institutions, electronic money institutions, investment firms and specialised PFS. In addition, the CSSF performed two inspections at significant banks, including one abroad.

The "Corporate governance" inspections were performed on the functioning of, and the collaboration between, the Board of Directors, the authorised management, their committees and the internal control functions. The "Corporate governance" team also carried out on-site inspections on the compliance with the regulatory requirements relating to the European Market Infrastructure Regulation (EMIR) at three credit institutions.

As regards the Board of Directors and their specialised committees, weaknesses were observed with respect to excessive use of circular resolutions by the Board of Directors instead of video-conferences or physical meetings allowing for critical and constructive debates. Moreover, the lack of involvement of the board members entailed shortcomings as regards the assessment of the internal control system, and in particular concerning the critical and document assessment of the quality of the work submitted by the authorised management, the réviseur d'entreprises *agréé* (approved statutory auditor) and the internal control functions, but also as regards the follow-up on corrective measures and recommendations issued by the supervisory authorities.

Weaknesses regarding the definition, compliance with local regulations, approval and implementation of diverse internal policies, charters and procedures have also been observed.

At the level of the authorised management and the management committees, the main shortcomings identified relate to their functioning and their responsibilities. In this area, the supervision of the implementation of group policies within subsidiaries, the formalisation and communication of management decisions or decisions on the internal governance framework, or also the monitoring of the proper implementation of the recommendations issued by the control functions were among the most observed weaknesses. Moreover, actual and potential conflicts of interest, which had not been identified by the inspected entities, were raised with respect to the allocation of responsibilities between authorised managers.

Deficiencies were also identified in the governance of the outsourced activities and functions, be it at the level of the prior identification of risks, the assessment of their materiality level, the drafting of framework contracts and procedures, or in regard to the supervision of the activities and functions which are outsourced by the inspected entities.

Finally, shortcomings were observed within two electronic money institutions in terms of compliance with the requirements regarding the segregation of client funds.

As regards the compliance function, the main deficiencies concern the definition, completeness and updating of the compliance programmes, the assessment reports of compliance risks as well as the implementation of the controls that these documents define. The CSSF also noted that the compliance function did not have, in certain cases, a specific budget, and, as a consequence, sufficient resources allowing it to achieve its tasks. Moreover, some compliance charters and policies were incomplete in respect of the definition of the roles and responsibilities vis-à-vis the management bodies or drawn up in such a way as to jeopardise the independence of the compliance function. Deficiencies were also noted as regards the consideration of the compliance function for important decision-making and in the assessment process for new products and activities.

As far as the risk control function is concerned, shortfalls were identified in the definition and comprehensiveness of the system of limits and risk appetite indicators. Other weaknesses concerned the absence of a risk management strategy and involvement of the risk control function in relation to credit risk monitoring. Finally, there were shortcomings as regards the allocation of responsibilities of the risk control function and the definition of the risk management process.

As regards the third line of defence, the main deficiencies concerned the establishment of an audit plan, but also the quality of the internal audit function's work, be it at the level of the scope of the work performed or the comprehensiveness of the identified weaknesses. In certain cases, the internal audit function had drawn up internal audit plans without considering a risk-based approach. There were also weaknesses relating to the independence and objectivity of certain members of the internal audit function, as well as deficiencies in the internal audit function's follow-up on the corrective measures to be implemented as a consequence of their identification.

In 2022, the on-site inspections relating to the compliance with EMIR, which were also carried out by the "Corporate governance" team, revealed weaknesses in the contractual framework and in the quality of the supervision of the outsourcing of certain EMIR-related activities. As far as risk mitigation techniques are concerned, the main shortcomings were identified at the level of the EMIR trade confirmation process, as well as of the effective implementation of the portfolio reconciliation process. Lastly, deficiencies likely to entail operational risks were identified with respect to the quality and completeness of the EMIR reporting.

1.10. "Business model & profitability assessment" on-site inspections

The purpose of the "Business model & profitability assessment" on-site inspections is to check the manner in which an institution's business and risk strategies are linked while pursuing its mediumand long-term financial interests. The main purpose of these missions is to better understand the sources of income and to identify vulnerabilities as regards profitability. Thus, a Business model & profitability assessment is an in-depth assessment of the viability and sustainability of an entity.

In 2022, the weaknesses revealed by this type of assessment included the absence of analyses of reliable performance factors, on the one hand, and the pricing methodology and profitability analyses of financial products, on the other hand, with the consequence that the Board of Directors of one entity was lacking key information allowing it to allocate resources efficiently and to take strategic decisions.

The CSSF also noted that the financial planning of an inspected entity relied on a set of growth assumptions per product and type of expense and lacked structured guidelines and systematic in-depth analyses. These weaknesses entailed that one entity was unable to assess neither its profitability nor the realistic nature of the assumptions for financial planning and thereby ensure the sustainability of its business model.

Finally, in the context of the SSM, the CSSF took part in an additional "Business model & profitability assessment" mission at a significant bank abroad.

1.11. "MiFID" on-site inspections

The purpose of "MiFID" on-site inspections is to assess whether the implemented MiFID framework is in line with the legal and regulatory requirements as regards investor protection and the related organisational measures.

In 2022, the CSSF carried out 13 "MiFID" on-site inspections at credit institutions, investment firms, management companies authorised under Chapter 15 of the 2010 Law and alternative investment fund managers within the meaning of the 2013 Law.

Ten out of the 13 inspections had a limited scope which allowed focussing on a MiFID theme or on a group of MiFID themes according to the risk assessment of the off-site supervisory departments. These inspections notably covered the organisational requirements to provide investment services and activities, product governance, the suitability assessment of financial products or services or the provision of information and reports to clients.

Major weaknesses identified during the "MiFID" on-site inspections mainly concerned the following MiFID themes: suitability assessment of investment products or services, product governance, identification and management of conflicts of interest, and provision of information and reports to clients.

Moreover, in connection with the Common Supervisory Action (CSA) conducted by ESMA in 2022 aiming at the ex-post disclosure of information on costs and charges to clients³, dedicated verifications were made in the context of the "MiFID" on-site inspections which led to the following key observations:

 certain elements of costs and charges were not included in the ex-post costs and charges reports sent to the clients, including third party payments received by the entities in connection with an investment service, termination fees, costs relating to a loan granted to clients to allow executing one or several transactions in financial products or costs linked to an investment or ancillary service recommended or marketed by the entities and provided by a third party;

- errors regarding the classification of the different types of costs and charges were noted, including erroneous distinction between the costs and charges linked to an investment or ancillary service, the costs and charges linked to financial products and the third party payments received by the entities in connection with an investment service;
- the illustration showing the cumulative effect of costs on return when providing investment services was not represented in the ex-post reports on costs and charges sent to the clients or was represented in an incorrect or incomplete manner;
- in the absence of available data on costs and charges of financial products, the alternative approach put in place by the entities did not always allow a reasonable and accurate enough estimation of their costs and charges;
- where the ex-post reports on costs and charges are made available electronically, the clients concerned had not systematically been notified thereof;
- the control framework (first and second lines of defence) on the content and disclosure of the ex-post reports on costs and charges to clients was deficient.

In this context, the CSSF refers to the document "Questions and Answers on MiFID II and MiFIR investor protection and intermediaries topics (ESMA35-43-349)"⁴ published and updated by ESMA, and in particular to Section 9, for details on the requirements with respect to disclosure of information on costs and charges to clients.

³ ESMA launches a Common Supervisory Action with NCAs on MiFID II costs and charges (europa.eu)

⁴ https://www.esma.europa.eu/document/qas-mifid-ii-andmifir-investor-protection-topics

1.12. "IT risk" on-site inspections

The "Supervision of information systems and support PFS" department includes a specialised team in charge of conducting IT on-site inspections at the supervised entities. In 2022, this team performed eight on-site inspections at two credit institutions, two investment firms, two support PFS, one payment institution and one electronic money institution. It also performed two on-site inspections at significant banks abroad in the framework of the SSM. Moreover, it cooperated with another CSSF team in an AML/CFT inspection at one bank.

The main shortcomings, in terms of frequency or seriousness, identified in 2022 during the "IT risk" on-site inspections concerned:

- IT security, including in particular the management of obsolete IT systems and their configurations in order to protect them from malicious events, the privileged access control, the information security testing framework, the management and remediation of critical vulnerabilities as well as the monitoring of the events related to IT security;
- the inventory of IT assets, the management of IT changes and incidents;
- the management of IT risks, with a very low, or even no, risk coverage by the second line of defence;
- internal audit, notably the partial coverage of IT activities, the low quality of audit work, competence issues to assess IT risks and the inefficient monitoring of corrective measures following observations of the internal audit function;
- IT governance, in particular IT strategy and a weak monitoring of IT activities;
- outsourcing, in particular the contractual aspects and operational follow-up.

2. Decisions as regards administrative sanctions and prudential enforcement measures taken in 2022

In 2022, the CSSF took the following decisions with respect to administrative sanctions and prudential enforcement measures. The total amount of administrative fines imposed in 2022 amounted to EUR 5,880,931.80.

2.1. Credit institutions

In 2022, the CSSF imposed four administrative fines and two reprimands on credit institutions pursuant to Articles 2–1(1) and 8–4(1), (2) and (3) of the Law of 12 November 2004 on the fight against money laundering and terrorist financing, Article 63(1) and (2), Article 63–2(1)(d) and Article 63–2(2)(e) of the Law of 5 April 1993 on the financial sector, as well as Article 51(2) of the Law of 12 July 2013 on alternative investment fund managers.

Two fines, amounting to EUR 356,000 and EUR 1,560,000, respectively, as well as one reprimand, were imposed for non-compliance with the AML/CFT professional obligations. Another fine, amounting to EUR 108,900, was imposed due to deficiencies in relation to the depositary bank function pursuant to the 2013 Law. A fine of EUR 365,000 was imposed for non-compliance with certain professional obligations relating to internal governance.

Moreover, a reprimand was imposed for violation by a credit institution of a decision by the CSSF which temporarily prohibited it from onboarding new investment fund structures, given that severe deficiencies in terms of organisation and governance had been observed.

2.2. Investment firms

In 2022, the CSSF imposed six administrative fines (against three in 2021) on investment firms as legal persons.

Four fines were imposed on one investment firm alone:

- in accordance with Article 63-2a of the Law of 5 April 1993 on the financial sector, for certain breaches of the provisions of the aforementioned law, of Delegated Regulation (EU) 2017/565 of 25 April 2016 and of Grand-ducal Regulation of 30 May 2018 on specific MiFID II-related organisational requirements (EUR 765,000);
- in accordance with Article 63(1) and (2) of the Law of 5 April 1993 on the financial sector, for certain breaches of the provisions of the law and of Circular CSSF 20/758 relating to the internal governance arrangements (EUR 250,000);
- in accordance with Article 12(2), eleventh subparagraph, point (b), of the Law of 23 December 2016 on market abuse for breaches observed in relation to the detection and notification of suspicious orders and transactions required under Article 16(2) of the Market Abuse Regulation and the regulatory technical standards laid down by Delegated Regulation (EU) 2016/957 (EUR 412,498.80)⁵;
- in accordance with Article 47(2), point (19), of the Law of 30 May 2018 on markets in financial instruments for breaches observed in relation to the reporting of transactions in financial instruments in accordance with Article 26(1), first subparagraph, and (3) of MiFIR (EUR 125,000)⁶.

Another investment firm had to pay a fine of EUR 210,000 in accordance with Article 8-4(1) and (3) of the Law of 12 November 2004 on the fight against money laundering and terrorist financing for non-compliance with certain AML/CFT professional obligations. Moreover, the CSSF imposed a EUR 5,000 administrative fine on an investment firm for non-compliance with the legal and regulatory deadlines for the submission of closing documents.

The CSSF used its right of injunction in accordance with Article 59 of the Law of 5 April 1993 on the financial sector 16 times (10 times in 2021) for the following reasons:

- non-compliance with the legal provisions relating to the capital ratio;
- non-compliance with the legal and regulatory deadlines for the transmission of the European prudential reporting (IFR reporting) and/or national reporting;
- deficiencies observed as regards the composition of the Board of Directors in relation to the provisions of Circular CSSF 20/758 on central administration, internal governance and risk management, as amended by Circulars CSSF 21/785 and CSSF 22/806;
- non-compliance with the legal requirements relating to capital base;
- shortcomings identified regarding the declarations of honour for natural persons;
- non-compliance with the legal and regulatory deadlines for the submission of closing documents;
- compliance with Article 22(2) of the Law of 5 April 1993 on the financial sector;
- granting of a loan by an investment firm to its shareholder;
- non-compliance with certain legal and regulatory requirements under MiFID II;
- deficiencies identified regarding the AML/FT procedures and policies in place.

⁵ Cf. also point 2.7 below.

⁶ Cf. also point 2.7 below.

The CSSF also imposed an injunction on a natural person under Article 63-2a of the Law of 5 April 1993 on the financial sector in the context of an illicit change of shareholder.

Moreover, an injunction was imposed on an investment firm in accordance with Article 8-2(1) of the Law of 12 November 2004 on the fight against money laundering and terrorist financing due to deficiencies observed relating to the laws and regulations in this field.

In 2022, the CSSF decided to withdraw, for a 24-month period, the professional standing of a natural person for breaching the obligation of transparency towards the CSSF by communicating incomplete, inaccurate or false information to the CSSF in the context of the declarations of honour of the natural person.

Furthermore, the CSSF made use, for an investment firm, of point (a) of the fourth indent of Article 63(2) of the Law of 5 April 1993 on the financial sector allowing it to pronounce a temporary or permanent prohibition on the execution of any number of operations or activities, as well as any other restrictions on the activities of the person or entity.

In 2022, the CSSF transmitted three reports to the State Prosecutor under Article 23(2) of the Code of Criminal Procedure, two reports under Article 74-2(4)(2) of the Law of 7 March 1980 on the organisation of the judicial system and five reports pursuant to Article 23(2) of the Code of Criminal Procedure and Article 74-2(4)(2) of the Law of 7 March 1980 on the organisation of the judicial system.

The CSSF reported 68 cases to the Prosecutor's Office, over the course of the year, regarding entities which claimed to be established in Luxembourg and offered investment services without authorisation (82 in 2021). The high number of these reports is mostly due to the emergence of fake websites meant to mislead potential investors.

2.3. Specialised PFS

In 2022, the CSSF imposed two administrative fines of EUR 266,000 and EUR 198,750, respectively, on two specialised PFS. These fines were imposed:

- in accordance with the provisions of Article 63(1) and (2) of the Law of 5 April 1993 on the financial sector for non-compliance with the AML/CFT professional obligations, relating to clients' risks assessment, the obligation of ongoing customer due diligence and the obligation to cooperate with the authorities following an AML/CFT off-site inspection;
- in accordance with the provisions of Article 63(1) and (2) of the Law of 5 April 1993 on the financial sector following an on-site inspection of a specialised PFS during which the CSSF identified breaches of provisions of the aforementioned law applicable with respect to (i) IT risk management, (ii) internal governance, (iii) professional secrecy obligation and (iv) the requirements regarding communication to the CSSF.

In four cases, the CSSF used its right of injunction in accordance with Article 59 of the Law of 5 April 1993 on the financial sector for the following reasons:

- non-compliance with the AML/CFT professional obligations to cooperate with the authorities and relating to the name matching process delegated to a third party;
- non-compliance with the AML/CFT professional obligations to cooperate with the authorities and relating to the documentation on the source of the client's funds and/or wealth;
- non-compliance with the AML/CFT professional obligations relating to (i) the transaction monitoring process, (ii) the name matching process, (iii) the information entered in the database, (iv) the regular reviews of clients according to risk level, (v) the tax review of the clients and (vi) the application of enhanced customer due diligence measures;

 non-compliance with the professional obligations as regards the depositary function relating to conflicts of interest, verification of ownership and record-keeping and the supervisory mission.

Moreover, the CSSF transmitted a report pursuant to Article 23(2) of the Code of Criminal Procedure and Article 74-2(4)(2) of the Law of 7 March 1980 on the organisation of the judicial system.

2.4. Support PFS

In 2022, the CSSF imposed two administrative fines on support PFS pursuant to Article 63 of the Law of 5 April 1993 on the financial sector.

Thus, one support PFS was fined EUR 18,750 for non-compliance with prudential obligations relating to the administrative and accounting organisation, as laid down in the provisions of the second subparagraph of Article 17(2) of the Law of 5 April 1993 on the financial sector and point V. of Circular CSSF 12/544.

Another support PFS was fined EUR 6,000 for breaches of the provisions of the second subparagraph of Article 17(2) of the aforementioned law and of Circular CSSF 05/187, notably following repeated delays in sending the monthly and quarterly periodic reports.

2.5. Payment institutions and electronic money institutions

In 2022, the CSSF imposed an administrative fine of EUR 145,000 on a payment institution, in accordance with Articles 2-1(1) and 8-4(1), (2) and (3) of the Law of 12 November 2004 on the fight against money laundering and terrorist financing, for non-compliance with certain AML/CFT professional obligations.

Moreover, the CSSF imposed an administrative fine of EUR 2,500 on each member of the administrative body of a payment institution pursuant to the provisions of Article 46(1) of the Law of 10 November 2009 on payment services, due to the late submission of the mandatory 2020 documents to the CSSF.

The CSSF also used its right of injunction in accordance with Article 31(4) of the Law of 10 November 2009 on payment services in two cases with respect to the communication of the annual accounts and prudential reports for the year 2021.

2.6. Investment fund managers (IFMs)⁷ and investment funds

In 2022, the CSSF took the following decisions under the Law of 13 February 2007 relating to specialised investment funds:

- administrative fines of EUR 4,000 each on the *dirigeants* (directors) of three SIFs for non-transmission of the annual financial report or the management letter;
- an administrative fine of EUR 4,000 on a liquidator of a SIF in voluntary liquidation for failure to submit information or for submission of false or incomplete information to the CSSF;

⁷ It should be pointed out that some of these administrative fines are still subject to reviews (*recours gracieux* or *recours administratif*) which are pending before the administrative courts.

- an administrative fine of EUR 4,000 on a liquidator of a SIF in voluntary liquidation due to repeated failures to provide the information requested by the CSSF regarding the SIF and its liquidation;
- administrative fines of either EUR 5,000 or EUR 10,000 each on the managers of two SIFs for a total amount of EUR 45,000 for the provision of incomplete information to the CSSF.

Pursuant to the Law of 15 June 2004 relating to the investment company in risk capital (SICAR), the CSSF imposed administrative fines amounting to EUR 500 each on the *dirigeants* of one SICAR for non-filing of the financial report or the management letter.

The CSSF took the following decisions under the 2010 Law:

- an administrative fine of a total amount of EUR 131,239 imposed on an IFM following an on-site inspection which revealed certain breaches of the 2010 Law relating to the general principles governing the organisational requirements as well as the requirements regarding the delegation of functions;
- an administrative fine of a total amount of EUR 36,449 imposed on an IFM following an on-site inspection which revealed certain occasional breaches of the 2010 Law relating to the requirements regarding the delegation of functions;
- an administrative sanction of a total amount of EUR 115,600 imposed on an IFM for breach of the legal and regulatory requirements and statutory provisions.

The following administrative fines were imposed pursuant to the 2013 Law:

- an administrative fine of a total amount of EUR 31,895 imposed on an IFM following an on-site inspection which revealed breaches of provisions of the 2013 Law relating to the general principles governing portfolio management, the valuation function and the requirements regarding the delegation of functions;
- an administrative fine of a total amount of EUR 22,100 imposed on an IFM following an on-site inspection during which the CSSF identified breaches of provisions of the 2013 Law relating to risk management, general principles governing organisational requirements and supervision of delegated activities.

Pursuant to the Law of 12 November 2004 relating to AML/CFT, the CSSF took the following decisions:

- an administrative fine of a total amount of EUR 9,050 imposed on an IFM following an on-site inspection which revealed occasional breaches of the provisions of the aforementioned law;
- an administrative sanction of EUR 283,000 imposed on the Luxembourg branch of an IFM authorised in another Member State following an on-site inspection which revealed occasional breaches of the provisions of the aforementioned law;
- an administrative sanction of a total amount of EUR 7,500 imposed on a registered IFM/AIFM, an administrative sanction of a total amount of EUR 5,000 imposed on an IFM, as well as 11 administrative sanctions of a total amount of EUR 95,000 on 11 registered AIFMs due to the late submission of the 2021 AML/CFT questionnaire.

In accordance with the EMIR Law, the CSSF imposed an administrative sanction of a total of EUR 42,400 on an IFM following an on-site inspection which revealed some isolated failures to comply with the reporting obligation applicable to derivative contracts provided for in Article 9(1) of Regulation (EU) No 648/2012 of 4 July 2012 on OTC derivatives, central counterparties and trade repositories.

Pursuant to the Law of 17 April 2018 on benchmarks, the CSSF imposed an administrative fine of EUR 45,800 on an IFM following an on-site inspection during which the CSSF identified failures to comply with the provisions of that law, read jointly with Articles 28(2) and 29(2) of the BMR.

2.7. Securities markets

The review of financial reports under the Transparency Law led the CSSF to issue, pursuant to Article 25 of the aforementioned law, two administrative fines amounting to a total of EUR 25,000, due to a delay in the disclosure and filing of annual financial reports. The CSSF also imposed an administrative fine of EUR 50,000 for failure by an issuer to respond to requests for information or submission of incomplete or inaccurate responses to these requests for information issued by the CSSF in the framework of its review of financial information of the company. At the same time, the CSSF issued a warning in relation to information concerning major shareholdings (provided for in Chapter III of the Transparency Law) and to shortcomings in relation to the disclosures by the issuer concerned.

In the context of the supervision of the obligations to detect and notify transactions that may constitute market abuse (under Article 16(2) of the Market Abuse Regulation) and of the obligations to report transactions in financial instruments (under Article 26(1) of MiFIR), the CSSF imposed two administrative fines of EUR 412,498.80 and EUR 125,000, respectively, upon identifying shortcomings in relation to these obligations.

2.8. Audit profession

Pursuant to the provisions of point (f) of Article 43(1) of the Audit Law and taking into account the provisions of Article 44 of this law, the CSSF imposed three administrative fines on réviseurs d'entreprises agréés amounting to EUR 10,000 each. These administrative fines were imposed based on the provisions of Article 40(2) and points (a) and (b) of Article 43(2) of the Audit Law for professional misconduct and negligence which led to the infringement of the legal and regulatory requirements relating to statutory audits.

Pursuant to the provisions of point (f) of Article 43(1) of the Audit Law, the CSSF imposed administrative fines on three *réviseurs d'entreprises agréés* amounting to EUR 1,500 each. These administrative fines were issued in accordance with the provisions of point (a) of Article 43(2) of the Audit Law for the infringement of the legal and regulatory requirements relating to ongoing training.

XIX. Resolution



The Law of 18 December 2015 on the failure of credit institutions and certain investment firms (BRRD Law), which notably transposes Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms (BRRD), designates the CSSF as the resolution authority in Luxembourg¹. The CSSF exercises the missions and powers assigned to it as resolution authority through the Resolution Board, whereas the "Resolution" department (RES department) performs the day-to-day tasks related to these missions. The Resolution Director, Mr Romain Strock, who chairs the Resolution Board, heads the RES department which counted 16 people as of 31 December 2022.

In line with the distribution of responsibilities, particularly between the Resolution Board and the Single Resolution Board (SRB), the RES department is in charge, among other things, at individual and group level, as concerns credit institutions and investment firms falling with in the scope of the BRRD Law or Regulation (EU) No 806/2014 (SRM Regulation)², of submitting the following for decision to the Resolution Board:

- adoption of resolution plans and resolvability assessments;
- measures to address or remove impediments to resolvability;
- appointment of a special manager;
- assurance regarding a fair, prudent and realistic valuation of the assets and liabilities;
- application of simplified obligations or granting waivers, among others, to the obligation to draft a resolution plan;
- setting the minimum requirement for own funds and eligible liabilities, in particular its level;
- adoption of resolution decisions and application of resolution tools in accordance with the relevant procedures and safeguards;

Following the transposition of BRRD2 (Directive 2019/879/EU), amending the BRRD, the BRRD Law was updated on 21 July 2021.

² The SRM Regulation (SRMR) was amended by Regulation (EU) 2019/877 (SRMR2).

- writing-down or conversion of relevant capital instruments;
- execution of the instructions issued by the SRB.

Following the entry into force of Regulation (EU) 2021/23 of 16 December 2020 on a framework for the recovery and resolution of central counterparties, the Law of 20 July 2022 designates the CSSF as the resolution authority of central counterparties in Luxembourg according to Article 3(1) of the Regulation. There are currently no central counterparties established in Luxembourg.

Moreover, the RES department represents the CSSF as resolution authority within international fora, such as the SRB, the EBA and, from 2023, ESMA. Indeed, at the end of 2022, ESMA began to take the necessary steps towards the constitution of a new permanent subgroup, the CCP Resolution Committee, which will bring together the central counterparties' resolution authorities and in which the CSSF will be represented.

As far as the EBA is concerned, the RES department is represented in the Resolution Committee (ResCo) which is a permanent internal committee of the EBA, set up in January 2015 for the purposes of taking decisions and fulfilling tasks conferred on the EBA and the national resolution authorities under the BRRD. The voting members are the directors of the national resolution authorities within the EU. In addition, the RES department participates in the work of the Subgroup on Resolution Planning and Preparedness (SGRPP), which is a subgroup of the Resolution Committee.

With respect to the SRB, the Resolution Director participates in the plenary session of the SRB as well as in the extended executive session when topics concerning Luxembourg entities are being discussed. This was the case in 2022 for the adoption by the SRB, which met in extended executive session, of resolution plans of several banking groups which included Luxembourg banking subsidiaries and of resolution plans of Luxembourg banking groups or systemic banks.

Moreover, the agents of the RES department participate in the work of the following permanent working sub-committees of the SRB: Resolution and its sub-structures, Contributions, Data collection, Administrative and Budget and Legal Network. The CSSF also participates in the SRB ICT Network.

The RES department continues its collaboration with the SRB for the drafting of resolution plans for Luxembourg significant banks under the competence of the SRB. In this context, frequent meetings, videoconferences and information exchanges take place with the representatives of the SRB, the CSSF's Banking Departments and the relevant banks. The RES department also participates, within the Internal Resolution Teams coordinated by the SRB, in drafting resolution plans for significant banking groups in the Banking Union which have Luxembourg subsidiaries.

In a cross-border context outside the SRB, the RES department is leading two resolution colleges relating to banks for which the CSSF is the group-level resolution authority. Moreover, the RES department continues to participate in the work, meetings and teleconferences of colleges of resolution authorities chaired by group-level resolution authorities from other EU countries.

The RES department also drafted a certain number of resolution plans for less significant banks under the direct responsibility of the Resolution Board.

The resolution plans for the two colleges relating to banks for which the CSSF is the group-level resolution authority as well as several of the aforementioned resolution plans for less significant banks have been adopted by the Resolution Board.

Two CSSF-CODERES circulars were published in 2022 concerning, on the one hand, the raising of the 2022 contributions for the Single Resolution Fund and, on the other hand, the collection of information for the calculation by the SRB of the 2023 contributions to this fund.

Finally, members of the RES department assisted the representatives of the Ministry of Finance during the discussions within the EU Council on the proposals for delegated regulations relating to the CRR-CRD package of the European Commission, as these texts concerned certain resolution-related aspects.

XX. Protection of depositors and investors



The Council for the Protection of Depositors and Investors (CPDI) is the internal executive body of the CSSF in charge of managing and administering the Fonds de garantie des dépôts Luxembourg (FGDL) and the Système d'indemnisation des investisseurs Luxembourg (SIIL). The FGDL is an *établissement public* (public body) separate from the CSSF and established by Article 154 of the Law of 18 December 2015 on the failure of credit institutions and certain investment firms (BRRD Law). The missions of the CPDI are defined in Part III "Protection of depositors and investors" of the BRRD Law. The CPDI is assisted in the performance of its duties by the "Depositor and Investor Protection" department (PDI department) of the CSSF which counts 4.6 full-time equivalent jobs. In general, the PDI department performs the operational tasks of the FGDL and of the SIIL.

• Activities of the CPDI and of the PDI department

The CPDI met twice in 2022 and deliberated twice by written procedure. Under its management, the PDI department performed the following tasks:

- cooperation tests with the Spanish and Dutch deposit guarantee schemes for the reimbursement of depositors at branches;
- collection of data on covered deposits through four circulars and verification of the data received;
- support to the FGDL's Management Committee in concluding a syndicated credit line agreement allowing the FGDL to meet its commitments in case its financial means are insufficient;
- improvement and further development of the IT tool for the management of the FGDL's interventions;

- participation in the drafting of EBA guidelines and opinions, notably as regards the calculation of contributions to deposit guarantee schemes;
- continued management of the reimbursement campaign of the depositors of ABLV Bank Luxembourg S.A. (in liquidation) (cf. below).

• FGDL interventions

As a reminder, the CSSF determined the unavailability of deposits at ABLV Bank Luxembourg S.A. on 24 February 2018, and the Luxembourg Tribunal d'arrondissement (District Court) ordered the bank's liquidation on 2 July 2019. Since March 2018, the FGDL has been reimbursing the covered deposits of depositors who transmitted the necessary information and whose eligibility was confirmed by the CPDI. In accordance with Article 176(8) of the BRRD Law, the depositors have ten years, following the date the unavailability has been determined, to request reimbursement of their deposits by the FGDL, even in the absence of a claim accepted by the liquidators. Nevertheless, in 2022, no new reimbursements were made, so that the total amount of deposits reimbursed by the FGDL remains at EUR 10 million.

Furthermore, no intervention took place with respect to deposit guarantee. However, the Système d'indemnisation des investisseurs Luxembourg (SIIL) has been activated after the suspension of payments was ordered by the Luxembourg *Tribunal d'arrondissement* (District Court) for Anphiko Asset Management S.A. on 16 December 2022, in accordance with Article 197(1) of the BRRD Law. Nonetheless, there were no compensation requests received in 2022.

• Financing of the FGDL

As at 31 December 2022, the FGDL counted 92 member institutions. As covered deposits increased by 3.3% in 2021, the FGDL had to collect EUR 9.4 million from the member institutions in 2022 (EUR 30.3 million in 2021) in order to maintain the target level of its assets, i.e. 0.8% of the covered deposits. Moreover, the FGDL collected EUR 41.2 million (EUR 45.0 million in 2021) as contributions for the buffer of additional financial means laid down in Article 180 of the BRRD Law.

The FGDL also received EUR 2.7 million for the administrative contribution provided for in Article 154(12) of the BRRD Law, in order to cover the costs related to the setting-up and maintenance of the credit line for six months.

As at 31 December 2022, the FGDL's available financial means, including the buffer of additional financial means, amounted to EUR 456.0 million. Since November 2022, the FGDL has a credit line granted by a syndicate of Luxembourg banks with a volume of EUR 1 billion, pursuant to Article 179(2) of the BRRD Law, and guaranteed by the Luxembourg State in accordance with the Law of 6 April 2022 on the granting of State guarantee for credit lines contracted by the FGDL. The covered deposits decreased by 0.4% year-on-year to EUR 38.2 billion as at 31 December 2022, due to the withdrawal of a significant institution.

XXI. Financial crime



This chapter presents the CSSF's involvement, throughout 2022, in the fight against money laundering and terrorist financing (AML/CFT) and as regards international financial sanctions at national and international level.

The year 2022 brought challenges and opportunities that further shaped the framework governing the fight against financial crime, for instance through the adoption of new legislation and risk assessments, but it was also the year of significant new threats. Thus, the Russian invasion of Ukraine in February 2022 had a major impact, leading the CSSF to stress the efforts necessary to implement effective financial sanctions and restrictive measures by the professionals under its supervision. The CSSF performed additional targeted reviews by means of on-site and off-site inspections covering the adequacy of the controls in place at the supervised professionals, in order to ensure compliance with the restrictive financial measures.

The year 2022 also marked the occasion for the CSSF to further confirm its commitments regarding AML/CFT. The CSSF worked actively to promote public-private partnerships and to keep the focus on its cooperation with other national, as well as European and international bodies.

1. CSSF supervision for combating money laundering and terrorist financing

Controlling compliance with professional AML/CFT obligations is an integral part of the supervisory framework established by the CSSF. AML/CFT supervision is based on a multiannual control programme which combines off-site and on-site supervisory measures. To this end, the different departments and teams in charge of AML/CFT at the CSSF follow an ML/TF risk-based approach.

1.1. Off-site AML/CFT supervision

1.1.1. Credit institutions and central securities depositories (CSDs)

As in 2021, the CSSF requested in 2022 all credit institutions and CSDs to answer the annual AML/CFT questionnaire in order to collect quantitative and qualitative data. The collected quantitative data is of utmost importance for the CSSF as it ties in directly with the AML/CFT supervision of credit institutions and with the statistical processing for national and international authorities. In order to share its expectations regarding the annual AML/CFT questionnaire, the CSSF organised a videoconference on 19 January 2023, gathering around 250 participants of supervised entities.

Off-site AML/CFT supervision also includes the analysis of the long form reports drawn up by the réviseurs d'entreprises agréés (approved statutory auditors) and the analysis of the reports drawn up by the internal control functions of credit institutions and CSDs (compliance function and internal audit function). In 2022, 174 observation letters were sent to credit institutions with respect to AML/CFT shortcomings identified in the 2021 closing reports and during the follow-up to the on-site inspections carried out by the CSSF. The responses from the credit institutions to these letters provide the CSSF with an updated understanding of their AML/CFT control environment, which is important, for instance, for the exchanges during AML/CFT colleges.

Based on these reports, the CSSF identified, in particular, severe deficiencies in relation to the name screening process (e.g. systems that did not function on a daily basis or only with an incomplete database, delays in the processing of alerts) and sent five injunction letters.

In 2022, the CSSF continued organising AML/CFT colleges in the context of the AML/CFT Colleges Guidelines of the Joint Committee of the European Supervisory Authorities, while pursuing a more risk-based approach. Thus, nine college meetings were organised in 2022 for a total of 19 colleges. The CSSF also participated in 26 AML/CFT college meetings organised by European authorities for 28 Luxembourg credit institutions, which makes the CSSF one of the lead supervisors as regards AML/CFT colleges activity in Europe. The European competent authorities for AML/CFT supervision are full members of the AML/CFT colleges organised by the CSSF as the main supervisory authority. However, other authorities could participate as observers, like the ECB for significant institutions or the FIU, subject to the agreement of all members. In 2022, the CSSF extended the scope of observers to the representatives of third-country supervisory authorities (Switzerland, Canada, etc.) and requested the credit institutions concerned by the colleges to participate in the meetings it had organised.

The CSSF continued its exchanges with the Luxembourg banking sector, in particular through meetings and regular contacts with the compliance officers and the members of the management bodies and administrative bodies of these credit institutions. In 2022, 123 meetings relating specifically to AML/CFT aspects were organised.

On 13 September 2022, the Expert Working Group Compliance of the CSSF was created. The majority of its private sector participants are compliance officers of credit institutions. During the year, the Expert Working Group Private Banking of the CSSF, established together with the ABBL and the FIU, was reorganised so as to extend its activities beyond pure private banking topics. As a result, it became a sub-group of the new Expert Working Group Compliance, whose first meeting took place on 20 October 2022. During this meeting, the subjects of interest for compliance officers, such as upcoming legislation, transaction monitoring, the notion of beneficial owner, etc., were reviewed and the CSSF presented the results of its survey of Luxembourg banks regarding accounts opened in the name of non-profit associations.

1.1.2. Investment firms

A dedicated team, counting four agents as at 31 December 2022 within the "Supervision of investment firms" department, deals with the aspects of the off-site AML/CFT supervision of investment firms.

As every year, the AML/CFT questionnaire, which allows the CSSF to collect quantitative and qualitative data, was sent to investment firms in 2022. Based on this data, the CSSF assigns an automatic ML/TF risk scoring to each investment firm. This scoring is also submitted to the expert judgement based on all the on-site and off-site information available to the CSSF, leading to a final ML/TF scoring per investment firm. The final scoring allows establishing the CSSF's off-site and on-site AML/CFT supervisory programme in accordance with a risk-based approach. Indeed, these final scorings are especially used for the allocation of the available resources (on-site and off-site) for AML/CFT supervision.

Off-site AML/CFT supervision includes, inter alia, the analysis of the long form reports drawn up by the *réviseurs d'entreprises agréés* and the analysis of the reports drawn up by the internal control functions (compliance function, internal audit function and risk control function). Observation and injunction letters were sent to investment firms with respect to the most severe AML/CFT weaknesses identified in these reports.

Moreover, the CSSF analyses the ML/TF risk self-assessments carried out by investment firms as well as the AML/CFT procedures where weaknesses were identified during the review of these reports.

In addition to the on-site inspections performed by dedicated teams, meetings with the Chief Compliance Officers of five investment firms were held to discuss specific AML/CFT-related points of attention, resulting, in particular, from the analysis of the answers provided in the AML/CFT questionnaires (frequency of updates of the lists of financial sanctions, lack of the four-eyes principle for customer data review, entity-related risk assessment not in compliance with Circular CSSF 11/529 and Article 2-2 of the Law of 12 November 2004 on the fight against money laundering and terrorist financing). Following these meetings, observation letters were sent.

In total, 22 observation letters and two injunction letters were sent in 2022 with respect to AML/CFT. They were issued following, in particular, (i) shortcomings identified in the 2021 closing reports (inadequate frequency of name screening against the lists of financial sanctions, too weak definition of the entity's risk appetite, etc.), (ii) weaknesses identified through the responses to the AML/CFT questionnaire (doubts regarding the existence of a transaction monitoring system, etc.) and (iii) material deficiencies detected in the AML/CFT procedures (insufficiencies as regards the obligations with respect to adequate internal control or the obligations to cooperate with the authorities based on Articles 4 and 5 of the Law of 12 November 2004 on the fight against money laundering and terrorist financing).

As regards European cooperation, in the context of the AML/CFT Colleges Guidelines, the CSSF, as lead supervisor, organised two AML/CFT college meetings in 2022 in relation to two investment firms with subsidiaries or branches in other EU Member States. It also participated in two AML/CFT college meetings organised by the authorities of other Member States.

1.1.3. Specialised PFS

Since 2021, the off-site AML/CFT team of the "Supervision of specialised PFS" department has grown and now counts five agents.

As in the previous year, the CSSF requested, in 2022, all specialised PFS to answer the annual AML/CFT questionnaire in order to collect quantitative and qualitative data. The data collected has been integrated in the off-site AML/CFT supervision which is performed by applying a risk-based approach.

Sixteen observation letters were sent to specialised PFS with respect to shortcomings identified notably (i) in the reports issued in the framework of the closing documents for the year 2021, (ii) in the 2021 AML/CFT questionnaires and (iii) during five initial control visits of the CSSF at newly authorised specialised PFS.

After reviewing the appointments proposed by the specialised PFS for the roles of compliance officer in charge of the control of compliance with the professional obligations (RC) and person responsible for compliance with the professional obligations (RR), a total of 18 acknowledgement letters were sent.

Moreover, the CSSF imposed one fine on a specialised PFS following an off-site AML/CFT investigation.

Several off-site verifications were made with regard to the European sanctions relating to the conflict in Ukraine, in order to check the compliance of the specialised PFS with their obligation to report without delay to the Ministry of Finance.

In 2022, eight meetings with specialised PFS covered specific AML/CFT topics, resulting, in particular, from the answers provided in the 2021 AML/CFT questionnaires. Two meetings were held with specialised PFS acting as depositaries/custodians of bearer shares. Three videoconferences took place regarding specialised PFS offering trust and company service provider services.

Among the topics covered during these meetings, there are the activities of specialised PFS, the ML/TF risk to which they are exposed, the systems, training and resources put in place with respect to the AML/CFT and compliance, the supervision of the delegated tasks relating to AML/CFT (where applicable), the involvement of members of the board of directors and/or of managers in projects relating to AML/CFT and compliance, the cooperation with the authorities, etc. The problems related to politically exposed persons (i.a. their detection, the case management and the exposure of specialised PFS to the risk of corruption) and those linked to the sanctions issued notably against entities and individuals in the context of the Ukraine conflict and the financing of the proliferation of weapons of mass destruction were also on the agenda of the meetings.

As regards cooperation with the private sector, the CSSF created, in 2022, a working group dedicated to specialised PFS in collaboration with the FIU, the Luxembourg Association of Compliance Officers (ALCO), the Luxembourg Alternative Administrators Association (L3A), the Luxembourg Private Equity and Venture Capital Association (LPEA) and the Luxembourg Association of Family Offices (LAFO). The first meeting of the working group, held on 17 October 2022, covered, among other things, the approval of the working group's operating rules by its members and the future update of the "Sub–Sector Risk Assessment on TCSP" for specialised PFS.

As for the international cooperation, the CSSF participated in one AML/CFT college regarding a specialised PFS that is part of a group comprising supervised entities from other European countries.

For the purpose of informing and educating supervised entities, the annual AML/CFT conference dedicated to specialised PFS was organised on 24 January 2022 with the participation of the FIU and the Ministry of Finance.

1.1.4. Payment institutions and electronic money institutions

A specialised team in charge of the off-site supervision of the ML/TF risk of payment institutions and electronic money institutions is in place within the "Innovation, payments, market infrastructures and governance" department. This team centrally manages the aspects of the AML/CFT supervision of payment institutions and electronic money institutions as well as of branches, agents and distributors of payment institutions or electronic money institutions authorised in other EU Member States.

As is the case for the other financial sector professionals, an annual AML/CFT questionnaire is sent to payment institutions and electronic money institutions as well as to the branches, agents and distributors of payment institutions or electronic money institutions authorised in other EU Member States. In addition to the data collected via these questionnaires, information is collected within the framework of the on-site and off-site supervision of these institutions. This data and information allow a risk assessment and a harmonised evaluation of these entities, having regard in particular to the risk level of their activities. They are also used to allocate the available (on-site and off-site) resources to AML/CFT inspections, in accordance with the basic principle governing the risk-based supervision.

The key elements of the off-site supervision of the ML/TF risk include the analysis of the annual reports of the compliance function and the internal audit function, the work carried out by the *réviseur d'entreprises agréé* as part of the long form report, the analysis of the aforementioned annual AML/CFT questionnaires and, where relevant, a critical review of the ML/TF policies and procedures of these entities, in particular, in the event of any material change having an impact on the provision of payment and electronic money services and/or the AML/CFT internal control arrangements in a broad sense.

Moreover, regular meetings and contacts are planned with the compliance officers and the members of the management body of these entities in order to further examine certain aspects of their reports, to follow the regular developments of their activities (in conjunction with the significant technological progress in this area) and of their organisation as well as of their internal control arrangements and to raise appropriate awareness to ML/TF risk.

The AML/CFT team also takes part in the assessment of the ML/TF risk and the AML/CFT policies and procedures submitted in the

application files of new payment institutions or electronic money institutions and in the monitoring, where applicable, of the AML/CFT remediation plans to be put in place by the institutions identified, notably in the framework of on-site inspections (on-site supervision).

1.1.5. Virtual asset service providers

With reference to the Law of 25 March 2020 amending the Law of 12 November 2004 on the fight against money laundering and terrorist financing, any virtual asset service provider (VASP) established or providing services in Luxembourg, on behalf of or for its customers, is subject to compliance with all the professional AML/CFT obligations and must be registered with the VASP register established by the CSSF.

A VASP means any person that provides, on behalf of or for its customers, one or more of the following services:

- exchange between virtual assets and fiat currencies, including the service of exchange between virtual currencies and fiat currencies;
- exchange between one or more forms of virtual assets;
- transfer of virtual assets;
- safekeeping or administration of virtual assets or instruments enabling control over virtual assets, including custodian wallet service;
- participation in and provision of financial services related to an issuer's offer or sale of virtual assets.

In accordance with the legal provisions in force, the CSSF's role vis-à-vis these providers is limited to registration, supervision and enforcement only for AML/CFT purposes.

As at 31 December 2022, nine providers were registered as VASP (against six as at 31 December 2021), including six that were established in Luxembourg and three in another country. Other registration files are being reviewed at the CSSF in order to ensure that the providers fulfil the relevant legal requirements and demonstrate the implementation of an AML/CFT framework adapted to the level of risk to which they are exposed, necessary for their registration in the CSSF's VASP register.

In 2022, the CSSF continued developing its internal procedures for the supervision of VASPs as well as the assessment and understanding of the ML/TF risk related to virtual asset services. To this end, it continued collecting statistical information in relation to the customers and business volumes of the registered VASPs. Thus, at the end of 2022, a volume of around EUR 30 billion in virtual asset exchange transactions had been executed and a volume of around EUR 4 billion in virtual assets was transferred by the entities offering virtual asset transfer services. These transactions and transfers mainly concerned activities in connection with Bitcoin and Ethereum, processed by the registered entities. The entities offering virtual asset custody services held about EUR 880 million in virtual assets as at 31 December 2022, corresponding mainly to Bitcoin and Ethereum.

As is the case for the other financial sector professionals, an annual AML/CFT questionnaire for VASPs was drawn up in 2022 and sent to VASPs in 2023. The data and information collected through this questionnaire will allow a risk assessment and a harmonised evaluation of these entities, having regard in particular to the risk level of their activities. They are also used to allocate the available (on-site and off-site) resources to AML/CFT inspections, in accordance with the basic principle governing the risk-based supervision.

Similarly to the other professionals, the key elements of the off-site supervision of the ML/TF risk include the analysis of the annual reports of the compliance function and, where applicable, the internal audit function, the quarterly collected quantitative data, the critical review of the ML/TF risk analyses and the AML/CFT policies and procedures of these entities, as well as the information collected during regular meetings and contacts with the compliance officers and the members of the management body of the entities concerned.

In 2022, the CSSF also had many exchanges and meetings with the private sector in order to make it aware of the new and future professional obligations such as, in particular, the obligations under the recast Regulation (EU) 2015/847 on the information accompanying transfers of funds (commonly referred to as the Travel Rule in the virtual asset ecosystem), to clarify the requirements and expectations of the regulator with respect to AML/CFT, to answer the questions of the industry as regards the provision of virtual asset services and to identify the practical difficulties encountered by the private sector. In addition, the CSSF also exchanged with other national, European and international authorities on questions relating to virtual assets and VASPs.

1.1.6. UCI departments

As part of the UCI departments, the "UCI AML" department conducts off-site controls and organises specific face-to-face meetings covering AML/CFT together with the other UCI departments. As is the case for the other professionals, the CSSF issues an annual AML/CFT questionnaire and analyses the answers provided by the IFMs and the products which have not designated a management company. Since December 2021, the "UCI AML" department has also been in charge of analysing the AML/CFT reports drawn up by the *réviseurs d'entreprises agréés* in accordance with Circular CSSF 21/788 (external AML/CFT reports).

The CSSF organised two virtual AML/CFT conferences on 1 July and 15 December 2022, gathering 651 and 927 participants from the private sector, respectively, in order to exchange views with the supervised entities and to share feedback on the results of the AML/CFT supervisory measures. In 2022, the CSSF extended the scope of the subjects addressed in the AML/CFT context. Thus, the speakers shared their experience with respect to the on-site inspections of the CSSF, the update of the sectoral ML/TF risk assessment, as well as the results of the analyses of the first external AML/CFT reports. The FIU also participated and shared its insights concerning the developments in the collective investment sector.

As part of the off-site supervision, 41 meetings exclusively covered AML/CFT based on an annual control plan drawn up following a risk-based approach. Fourteen sanctions were imposed for late submission of the responses to the annual AML/CFT questionnaire and 196 injunction letters, 392 observation letters and 78 Dear CEO Letters were sent by the CSSF.

Moreover, the CSSF cooperated with various foreign supervisory authorities as part of its AML/CFT supervision of the entities of the collective management sector. Thus, the CSSF sent 23 international cooperation requests to foreign authorities and received 22 cooperation requests. In the same context of international cooperation and AML/CFT supervision of entities of the collective management sector, the CSSF organised seven AML/CFT college meetings and took part, according to a risk-based approach, in 13 AML/CFT college meetings organised by European competent authorities in accordance with the AML/CFT Colleges Guidelines.

Finally, the CSSF continued the activities of the Expert Working Group AML UCI established in 2018 and which met nine times in 2022.

1.2. On-site AML/CFT supervision

AML/CFT on-site inspections are carried out at all the professionals supervised by the CSSF in order to assess that the quality of the AML/CFT framework is in line with the legal and regulatory requirements.

In 2022, the "On-site Inspection" department carried out 39 AML/CFT inspections focussing more particularly on professionals whose sector of activities is exposed to an inherent high ML/TF risk according to the national ML/TF risk assessment and/or whose individual ML/TF risk is considered high. On-site inspections were therefore carried out at credit institutions, and in particular at those providing private banking activities, as well as at those providing trade finance or services related to virtual assets, at specialised PFS providing domiciliation or transfer agent services, at management companies for which the activity of transfer agent or individual discretionary portfolio management was covered, at investment firms, at electronic money institutions and at Luxembourg agents acting on behalf of foreign payment institutions. Some of these inspections concerned more particularly the compliance with the European financial sanctions and restrictive measures against Russia and Belarus with regard to the conflict in Ukraine, or the risk of corruption.

Twenty-seven out of 39 inspections focussed on the assessment of one or several high-risk processes according to the risk assessment performed by off-site supervision departments. They covered, for instance, the process for entering into a business relationship, transaction monitoring, screening/name matching or, in the case of delegation of certain AML/CFT controls to a third party, the quality of the supervision performed. The most significant shortcomings, in terms of frequency or seriousness, identified in 2022, concerned the following issues:

- absence of controls aiming to ensure the efficiency of the name matching tools used by the professionals; the implementation of such controls would have allowed them to identify certain weaknesses observed during the AML/CFT inspections, such as delays in the update of official lists or absence of name matching controls over a given period; weaknesses regarding the processing of the generated alerts, such as lack of second level control by the compliance function;
- delay in the periodical review of customers leading to an absence of review of the business relationships presenting higher risk factors for a long period;
- failure to take into account all the risk factors to determine the ML/TF risk level of customers, with the consequence that inappropriate due diligence measures were applied;
- deficiencies in the ongoing due diligence process applied to transaction monitoring with, in some cases, scenarios that did not appropriately cover risky situations or inadequate processing of the alerts generated by these scenarios;
- deficiencies with respect to customer files, in particular as regards information (and corroborating documents according to the customer's risk level) on the source of the funds and the origin of wealth;
- failures to meet the obligation to report, or to report without delay, any ML/TF suspicions or any associated predicate offence to the FIU.

The year 2022 was particularly marked by the implementation of European financial sanctions and restrictive measures against Russia and Belarus with respect to the situation in Ukraine. In order to ensure that the professionals comply with these sanctions and restrictive measures, a set of thematic missions was initiated with six professionals (three credit institutions, two specialised PFS and one investment firm) presenting a significant exposure towards Russia/Belarus. In this context, the CSSF verified, in particular, the sound functioning of the name matching system (applied to the customer base, payment systems and assets under management), ensured that the processing of the generated alerts was efficient and adequate and verified that the professionals had put in place mechanisms allowing, on the one hand, to verify that the transactions linked to Russia or Belarus did not breach the sanctions specific to certain business areas and, on the other hand, to identify potential circumventions or circumvention attempts of the European sanctions.

These thematic missions allowed observing that the professionals had been particularly proactive and had swiftly engaged with the authorities since the beginning of the Ukrainian crisis. Thus, the six professionals had taken adequate measures in order (i) to identify the business relationships that had links to the entities or persons concerned by the restrictive measures, (ii) to communicate to the Ministry of Finance and to the CSSF the relationships concerned and (iii) to freeze the assets and/or block the transactions linked to these business relationships.

No case of non-compliance with the restrictive measures against Russia/Belarus was detected. The name matching system was efficient, even though certain weaknesses were identified, such as a lack of control by the compliance function regarding the processing of the generated alerts. The CSSF also reiterated that where a person subject to restrictive financial measures is identified, the Ministry of Finance must be notified without delay. Finally, beyond the identification of persons under sanction, the CSSF drew the attention of the professionals on the compliance with sectoral sanctions which requires an in-depth review of the transactions originating from or addressed to Russia/Belarus.

During its AML/CFT control missions, the CSSF focussed in particular on the politically exposed persons and on the way the professionals covered the risk of laundering of the proceeds of corruption. Overall, the professionals put in place mechanisms to detect politically exposed persons, these persons being considered as presenting a higher risk. However, the CSSF observed that certain professionals did not apply the highest diligence level to these relationships, did not adequately monitor the transactions and did not always sufficiently verify the origin of the funds and/or wealth. In addition, several professionals had to be reminded that they needed the authorisation of the compliance officer in charge of the control of compliance with the professional obligations (RC) and of the person responsible for compliance with the professional obligations (RR) before entering into or maintaining a business relationship with politically exposed persons.

Moreover, the CSSF focussed on the professionals offering trade finance services. Import/export businesses have a high ML/TF risk and are exposed to sectoral sanctions. Therefore, very specific controls must be applied in order to verify the existence and the nature of the exchanged goods. The CSSF will continue to closely monitor the providers of this type of services in the coming years.

In addition, the CSSF closely assessed the controls performed by the professionals acting as depositaries of bearer shares. Although the CSSF noted that the due diligence measures applied to clients having deposited their shares were generally similar to those applied to other clients, the missions however revealed that the professionals did not always seek to sufficiently understand the reasons why customers use bearer shares.

Finally, several AML/CFT control missions revealed deficiencies regarding the internal governance arrangements and, notably, the customer acceptance process which presented potential conflicts of interest owing to the validation of the entries into business relationship by persons cumulating AML/CFT control functions and commercial functions. This acceptance process may expose the professional to the risk of accepting business relationships presenting a higher ML/TF risk which would not be consistent with the risk appetite defined by the professional or for which appropriate due diligence measures would not have been applied. Deficiencies were also identified as regards the supervision of activities performed by the branches and subsidiaries of professionals, as well as the level of exhaustiveness of the monitoring plan of the compliance function regarding AML/CFT. These deficiencies must be seen in combination with, in certain cases, a lack of resources observed within the compliance function. Thus, the CSSF wishes to draw the attention of the professionals on the importance of sound internal governance arrangements with respect to AML/CFT.

As regards more particularly the collective management sector, the "UCI on-site inspection" department carried out, in 2022, five inspections at authorised investment fund managers and registered alternative investment fund managers. The missions completed during the year gave rise to the following major observations at certain players:

- weaknesses in customer due diligence measures, as required by Article 3 of the Law of 12 November 2004 on AML/CFT, and insufficient application of enhanced due diligence on intermediaries, as required by Article 3 of CSSF Regulation No 12-02;
- weaknesses regarding the obligation to detect persons, entities and groups subject to prohibitions or restrictive financial measures as provided for in Article 33 of CSSF Regulation No 12-02, namely important delay in the processing of alerts generated by the filtering system, insufficient control frequency and incomplete controls with respect to beneficial owners and persons pretending to act on behalf of others;
- weaknesses with respect to risk classification and filtering controls in light of the lists of restrictive financial measures regarding investments (specific obligations laid down in Articles 33, 34(2) and 39(1a) of CSSF Regulation No 12-02);
- weaknesses in the risk-based approach and the risk assessment as provided for in Article 2-2 of the Law of 12 November 2004 on AML/CFT;
- shortcomings concerning work carried out by the compliance officer in charge of the control of compliance with the professional obligations as laid down in Article 4(1) of the Law of 12 November 2004 on AML/CFT.

Moreover, five missions concerned the politically exposed persons (PEP) and the fight against corruption. In this context, the CSSF reiterates that, according to the legal obligations, the following should be observed:

 have appropriate systems in place, including risk-based procedures, in order to detect the relations with PEPs when the business relationship is established and on an ongoing basis, at least every six months;

- obtain the approval of the senior management in accordance with Article 1(19) of the Law of 12 November 2004 on AML/CFT, to establish or pursue a business relationship with a PEP;
- take reasonable measures to establish the source of funds;
- conduct enhanced monitoring of the business relationship by increasing the number and timing of controls applied.

Five other missions concerned the use of IT tools in relation to the controls regarding ongoing due diligence. It must be borne in mind that the system must be automated, except when the professional can prove that the volume and nature of the customers and the transactions to be supervised do not require such automation. In accordance with Article 39 of CSSF Regulation No 12–02, the process must include:

- an initial validation (at least by the person responsible for compliance with professional obligations);
- a control and monitoring (adapted to the evolution of activities, clients and AML/CFT standards and measures);
- keeping a complete and up-to-date customer database complying with the four-eyes principle;
- taking into account the characteristics of the activities and customers and the relevant risks;
- in case of delegation, the reception of sufficiently detailed key performance indicators;
- the preparation of written reports on identified transactions or persons, as well as the criteria which led to the identification;
- a cooperation mechanism with the FIU and the supervisory authorities, where necessary.

Furthermore, it should be noted that at the annual AML/CFT conference organised for the collective management sector on 15 December 2022, the CSSF presented its working methodology, focussing on the thematic reviews mentioned above, as well as the main weaknesses encountered during its inspections.

2. Amendments to the regulatory framework regarding the fight against money laundering and terrorist financing

This section highlights key AML/CFT legal and regulatory topics at European, international and national level for the year 2022.

2.1. European Union AML/CFT framework

On 27 October 2022, the European Commission issued its third Supranational Risk Assessment Report (SNRA) on the assessment of the risk of money laundering and terrorist financing affecting the internal market and relating to cross-border activities. The SNRA consists of two documents, the report and a detailed Staff Working Document. It re-assesses the money laundering and terrorism financing threats and vulnerabilities of 43 products and services, puts focus on risks for the crypto-assets industry and highlights risks related to cash.

The SNRA also addresses the main actions taken by Union bodies and national authorities in the implementation of EU sanctions, and the results delivered by a subgroup set up within the Seize and Freeze Task Force by the European Commission and the Member State tax authorities. The European Commission also used this opportunity to remind how a high level of transparency of beneficial ownership information is crucial in combating the misuse of legal entities¹.

Regarding the context of financial restrictive measures, the European Commission adopted, on 2 December 2022, a draft directive on the definition of criminal offences and penalties for the violation of Union restrictive measures². The objectives of this proposal are to (i) determine criminal offences related to the violation of Union restrictive measures, (ii) ensure effective, dissuasive and proportionate penalty types and levels for criminal offences related to the violation of Union restrictive measures, (iii) foster cross-border investigation and prosecution and (iv) improve the operational effectiveness of national enforcement chains to foster investigations, prosecutions and sanctioning.

¹ https://www.cssf.lu/en/Document/2022-supranational-reportof-the-european-commission/

² https://eur-lex.europa.eu/legal-content/EN/TXT/ PDF/?uri=CELEX:52022PC0684

On 5 December 2022, Regulation (EU) 2022/2374 implementing Regulation (EU) 2020/1998 concerning restrictive measures against serious human rights violations and abuses replaced the entries concerning six natural persons and two entities within the list in Annex I of the Regulation (EU) 2020/1998.

On 7 December 2022, the EU Council adopted its position on the AML/CFT Regulation and the new (sixth) AML/CFT Directive³ which were presented by the European Commission in July 2021, together with the proposals for the regulation creating the future Anti-Money Laundering Authority (AMLA) and the recast of the regulation on transfer of funds. The four documents represent the so-called AML package or AML Rulebook⁴. Tripartite negotiations on the AML/CFT Regulation and the AML/CFT Directive will start mid-2023. Regarding the draft recast of Regulation (EU) 2015/847 on information accompanying transfers of funds, now addressing also transfers of certain crypto-assets, a provisional agreement has been reached between the EU Council and the European Parliament on 29 June 2022⁵.

As every year, the European list of non-cooperative jurisdictions for tax purposes has been updated twice based on the work of the Code of Conduct Group (Business Taxation) established by the EU Council. The following countries and territories were added on the list (Annex I): Anguilla, the Bahamas and Turks and Caicos Islands. At the end of 2022, the list contained thus 12 countries/territories that either have not engaged in a constructive dialogue with the EU on tax governance or have failed to deliver on their commitments to implement the necessary reforms.

Finally, on 19 December 2022, the European Commission adopted a new delegated act on high-risk countries (Commission Delegated Regulation (EU) 2023/410 amending Delegated Regulation (EU) 2016/1675), adding the Democratic Republic of the Congo, Gibraltar, Mozambique, Tanzania and the United Arab Emirates to the list of jurisdictions having strategic deficiencies in their AML/CFT regimes and removing Nicaragua, Pakistan and Zimbabwe. On 7 January 2022, the Commission Delegated Regulation (EU) 2022/229 had already introduced changes to the list by adding Burkina Faso, Cayman Islands, Haiti, Jordan, Mali, Morocco, the Philippines, Senegal, and South Sudan and deleting the Bahamas, Botswana, Ghana, Iraq and Mauritius.

• The EBA in charge of AML/CFT

On 5 January 2022, the EBA published its Opinion on the scale and impact of de-risking in the EU and the detrimental impacts of unwarranted de-risking. De-risking can cause the financial exclusion of legitimate customers and, consequently, affect notably financial stability. The CSSF, who published the EBA Communiqué along with its Opinion on its website⁶, is emphasising that access to basic financial products and services, notably by refugees or asylum seekers, is a prerequisite for the participation in the economic and social life. The CSSF does not support the wholesale de-risking of any category of customers but instead encourages professionals to adapt their tools to manage ML/FT risks effectively and efficiently. This topic will remain on the agenda in 2023, as a consultation regarding guidelines on effective management of ML/FT risks and access to financial services has been launched by the EBA on 6 December 2022, running until 6 February 2023, with two proposals that provide for:

- amending the existing ML/TF risk factors guidelines of the EBA, focusing on customers that are NPOs (Not-for-Profit organisations);
- issuing a new set of guidelines on policies and controls for the effective ML/TF risk management when providing access to financial services.

In June 2022, the EBA published guidelines on policies and procedures in relation to compliance management and the role and responsibilities of the AML/CFT Compliance Officer, applicable from 1 December 2022. The CSSF has drawn the attention of professionals to these guidelines in June 2022 and plans implementing documents on this subject.

³ https://www.consilium.europa.eu/en/press/pressreleases/2022/12/07/anti-money-laundering-council-agrees-itsposition-on-a-strengthened-rulebook/

⁴ For further details, see also CSSF Newsletter No 251 and the 2021 CSSF Annual Report.

⁵ https://www.consilium.europa.eu/en/press/pressreleases/2022/06/29/anti-money-laundering-provisionalagreement-reached-on-transparency-of-crypto-assettransfers/

⁶ EBA alerts on the detrimental impact of unwarranted derisking and ineffective management of money laundering and terrorist financing risks | European Banking Authority (europa. eu)

Regarding the specific inquiry into the Luanda leaks revelations of 2020, the EBA issued in February 2022 a formal report providing information on the EBA's risk assessment in that regard and the actions taken by financial supervisors, i.a. how authorities responded to allegations that Isabel dos Santos or her associates laundered the proceeds from corruption through the financial sector or through owned or controlled financial institutions, and the exposure to risks related to the lack of identification by credit and financial institutions of customers or beneficial owners who are politically exposed persons or the ML/TF risks related to authorities' own assessment of persons from high ML/TF risk jurisdictions who own or control financial institutions.

The CSSF also implemented and started contributing to the new EBA AML/CFT central database named EuReCa (European Reporting system for material CFT and AML weaknesses), which aims to store within a same and single European database the material weaknesses identified by the competent authorities in financial sector operators and the measures they have taken in response.

2.2. International AML/CFT framework -Financial Action Task Force (FATF)

The year 2022 has again been rich in new guidance from the FATF. Particular focus has been placed on digital transformation (see for example the June 2022 conference⁷) and on strategies to promote effective assets recovery actions and improve results on assets recovery. The latter also involves the revision of Recommendations 4 (Confiscation and provisional measures) and 38 (Mutual legal assistance: freezing and confiscation).

The topic of transparency and beneficial ownership continued to be on the agenda of the FATF with the revision, in March 2022, of its Recommendation 24 with its Interpretive Note, aiming at preventing the misuse of corporate structures or legal persons for money laundering or terrorist financing and to ensure that there is adequate, accurate and up-to-date information on the beneficial ownership and control of legal persons. In August 2022, the FATF also organised a webinar on beneficial ownership and transparency of legal persons. Finally, on the same topic, a revision of Recommendation 25 on beneficial ownership of legal arrangements has also been initiated in order to ensure a balanced and coherent approach to beneficial ownership in the FATF Recommendations on trusts and other legal arrangements⁸. The revision of Recommendation 25 and its Interpretive Note was finalised in March 2023.

Regarding country risk and FATF assessments (i.a. statements by the FATF concerning the list of high-risk jurisdictions on which enhanced due diligence and, where appropriate, countermeasures are imposed, as well as on jurisdictions under increased monitoring of the FATF), please refer to the updates to the annex of Circular CSSF 22/822 and the predecessor circulars. As of October 2022, the CSSF is not replacing the circular at each change of the list by the FATF but is only updating the annex to the Circular CSSF 22/822 that provides the details on the countries and jurisdictions under scrutiny⁹.

In 2022, the FATF has furthermore adopted three mutual evaluation reports of the following member countries that are of specific interest for Luxembourg: Germany, France and the Netherlands. With respect to the situation in Ukraine, the FATF reminded in several statements throughout the year all jurisdictions to remain vigilant to threats to the integrity, safety and security of the international financial system arising from Russia's aggression in Ukraine and to possible emerging risks from the circumvention of measures taken in order to protect the international financial system. As another consequence of this conflict, the FATF suspended Russia's membership as of 24 February 2023.

Finally, the following documents of interest have been published by the FATF in 2022:

- Report on Money Laundering from Fentanyl and Synthetic Opioids, November 2022;
- Report on Data Protection, Technology and Private Sector Information Sharing, July 2022;
- Risk based approach for the real estate sector, guidance of July 2022 and corresponding FATF webinar;

⁸ https://www.cssf.lu/en/Document/fatf-revision-ofrecommendation-25-and-its-interpretive-note/

⁷ https://www.fatf-gafi.org/content/fatf-gafi/en/publications/ Digitaltransformation/Conference-digital-transformation.html

⁹ https://www.cssf.lu/en/Document/circular-cssf-22-822/

• Money Laundering and Terrorist Financing Risks Arising from Migrant Smuggling, report of March 2022 and corresponding FATF webinar.

In 2022, the Luxembourg AML/CFT framework has been evaluated, notably during an on-site visit, through the FATF Mutual Evaluation process and the CSSF has worked closely with the respective ministries and other counterparts on this exercise. Representatives of the private sector also played an important role in the evaluation exercise. The final report regarding Luxembourg's evaluation will be adopted at the end of June 2023 and published in September 2023.

2.3. National AML/CFT framework

As for the FATF, the management and recovery of seized or forfeited assets has also been a major plank of the legislative agenda in Luxembourg, completed through the adoption of the Law of 22 June 2022¹⁰. This new text adapts the existing regime of the freezing and confiscation of assets and strengthens the implementation of the management and recovery of seized assets by establishing two national offices:

- an Asset Management Office (abbreviated BGA) under the authority of the Ministry of Justice, and designated as national centralised Asset Management Office;
- an Asset Recovery Office (abbreviated BRA) under the authority of the Public Ministry of the District Court of Luxembourg and designated as national Asset Recovery Office. The BRA is as such the national contact point for the cooperation between asset recovery offices within Member States for the purpose of facilitating the tracing and identification of proceeds of crime and other assets or property related to crime.

The Law of 25 March 2020 establishing a central electronic data retrieval system related to IBAN accounts and safe-deposit boxes has also undergone a few modifications providing for a direct access to the system by the BRA pursuant to the Law of 22 June 2022 and an indirect access by the Luxembourg Business Register (following the Law of 28 October 2022 introducing the procedure of administrative dissolution without liquidation). The Law of 29 July 2022, which entered into force on 12 August 2022, introduced a series of minor amendments into the Law of 12 November 2004 on the fight against money laundering and terrorist financing and the Law of 19 July 2020 establishing the register on fiducies and trusts. These changes clarify i.a. several aspects of the professionals' obligations such as the requirement to always identify the beneficial owner, irrespective of the professionals' assessment of risk. They also introduce the obligation to consult the Beneficial Owner Register (RBE) and the register on fiducies and trusts throughout the entire relationship and to compare the information recorded by the professionals with that of the registers in order to detect either the existence of any erroneous data or the absence of all or part of the data. The Law of 29 July 2022 also specified, with regard to the obligation to obtain and record information, that trustees and fiduciaries shall update the data after any change to this information within a reasonable period of time, not exceeding one month after said change.

Furthermore, Grand-ducal Regulation of 25 October 2022 has notably abolished the provision regarding numbered accounts within Grand-ducal Regulation of 1 February 2010 on AML/CFT.

Grand-ducal Regulation of 14 November 2022 confirmed that restrictive measures shall be applied and reported without delay and this without any prior notice on the basis of the Law of 19 December 2020.

Finally, pursuant to the judgement of the European Court delivered on 22 November 2022¹¹, public access to beneficial ownership information within the Luxembourg RBE has been restricted, as in other European countries, but RBE information has been made available again in December 2022, i.a. to obliged entities under the Law of 12 November 2004 in a manner compliant with the aforementioned decision¹². The CSSF reiterates that professionals under its AML/CFT supervision are required to proceed without delay with their registration with the RBE in order to be able to perform their duties.

¹¹ Proceedings WM and Sovim SA v Luxembourg Business Registers in joined cases C-37/20 WM and C-601/20 Sovim

¹⁰ See also CSSF Newsletter No 258 of July 2022.

¹² https://gouvernement.lu/fr/actualites/toutes_actualites/ communiques/2022/12-decembre/21-acces-rbe.html

In furtherance to the National Risk Assessment of Money Laundering and Terrorism Financing (NRA) of 2018 and 2020, it shall be stressed that Luxembourg finalised in 2022 its first Vertical risk assessment on terrorist financing (VRA on TF) and Vertical risk assessment on legal person and legal arrangements (VRA on LP/LA).

Replicating the same collaborative approach used for the NRA exercises, these VRAs have been elaborated under the lead of the Ministry of Justice, through close collaboration among different agencies, authorities and committees, including the CSSF with regard to the relevant risk exposure of the sectors under its supervision¹³.

CSSF information

In March 2022, the CSSF published different sets of FAQs regarding international financial sanctions and, specifically, concerning the situation in Ukraine, including FAQs for the press and FAQs on the application of Liquidity Management Tools (LMT) by investment funds. In addition, in April 2022, a dedicated communication provided guidance to professionals when implementing these measures.

On 31 May 2022, the CSSF published an update of the sub-sector risk assessment (SSRA) on the collective investment sector¹⁴. The SSRA identified cybercrime, abuse of virtual assets and geopolitical crisis pursuant to the situation in Ukraine as main emerging threats for the collective investment sector in 2022. According to the five risks factors assessed by the SSRA on (1) intermediaries, (2) clients/investors and geography, (3) market structure, (4) products, services and transactions, and (5) channels of distribution, UCITS management companies remain the most vulnerable cluster, mostly explained by the volume of assets under management within these companies. The SSRA recognised improvements in the implementation of mitigation measures by the professionals, in particular with respect to the due diligence process and oversight on third parties performing AML/CFT controls. It welcomed the increased involvement of senior management in the AML/CFT framework as well as the continuous

13 For further information, please refer to CSSF Newsletter No 254 and to the webpage https://www.cssf.lu/en/financialcrime/. work of professional associations in this sector. On the other hand, the CSSF reminds the importance of performing AML/CFT due diligence on assets when performing investment operations.

In December 2022, the CSSF published an important guide for payment agents and e-money distributors aiming at supporting them in the implementation of AML/CFT controls¹⁵.

Finally, awareness should be raised to the list of trusts and similar legal arrangements governed under the law of the Member States as notified to the European Commission pursuant to Article 31(10) of Directive (EU) 2015/849 of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing.

2.4. Financial sanctions

Professionals bear responsibility to ensure the integrity of the Luxembourg financial sector and as such they shall comply with the EU restrictive measures in financial matters. In particular, with respect to the sanctions against Russia, the CSSF provided comprehensive information on its dedicated webpage https://www.cssf.lu/en/ ukraine-crisis/. As mentioned under point 1. above, the CSSF conducted off-site and on-site monitoring of the implementation of the financial sanctions by the supervised entities. For example, specific questionnaires were sent out to more than 30 transfer and registry agents and the CSSF closely monitored the suspensions from trading by the Luxembourg Stock Exchange of over 650 financial instruments, mostly debt instruments, which were either directly (very few) or indirectly targeted by the restrictive measures, or which were impacted by the fact that settlement in Russian Rubles was no longer possible.

Throughout the year, the CSSF participated in the meetings of the national monitoring committee for sanctions, recast through the Law of 20 July 2022 and chaired by the Ministry of Finance. As representative of this committee, the CSSF played an active role in the implementation and monitoring of sanctions as well as in the elaboration of appropriate related national policies and contributed to awareness raising activities

¹⁴ https://www.cssf.lu/en/Document/ml-tf-sub-sector-riskassessment/

¹⁵ https://www.cssf.lu/en/Document/payment-agents-emoney-distributors-guidance-for-the-prevention-of-moneylaundering-and-terrorism-financing/

(e.g. dedicated conferences and workshops with professionals).

3. CSSF participation in meetings regarding the fight against money laundering and terrorist financing and regarding international financial sanctions

As every year, the CSSF participated in several European and international working groups relating to AML/CFT. Among these groups, it is worth mentioning the Expert Group on Money Laundering and Terrorist Financing (EGMLTF) of the European Commission with respect to the implementation of the AML package, the AML Coordination NCA Network of the ECB, the Standing Committee on Anti-Money Laundering (AMLSC) of the EBA, the anti-money laundering group (AMLEG) of the Basel Committee and the FATF, as well as various exchanges in the context of the financial sanctions in view of the situation in Ukraine.

In 2022, the CSSF continued developing the cooperation at national level as well, in order to intensify the exchange and coordination with other AML/CFT supervisors and self-regulatory bodies, including the Commissariat aux Assurances, the Ordre des Experts-Comptables and the Barreau de Luxembourg.

Furthermore, the CSSF held many exchange meetings with representatives of the FIU and participated in all meetings organised in the context of the national prevention committee chaired by the Ministry of Justice and the monitoring committee regarding international financial sanctions chaired by the Ministry of Finance (cf. point 2.4. above). The CSSF also contributed to the different national initiatives in terms of ML/TF risk assessment or changes introduced into the Law of 12 November 2004 on AML/CFT. XXII. Financial consumer protection



1. Financial consumer protection and financial education

1.1. Financial consumer protection and financial education at national level

As part of its duty of financial education, the CSSF continued to develop its information portal www.letzfin.lu which contains a broad range of information on finance. In addition, the presence of Lëtzfin on Facebook and Instagram was increased notably with respect to sustainable finance, digital finance and fraud prevention.

Given the challenges surrounding the development of sustainable finance, the CSSF, the Fondation ABBL pour l'éducation financière and the Luxembourg Sustainable Finance Initiative (LSFI) mandated ILRES to conduct a survey with the aim of better assessing the perception and knowledge of Luxembourg households in this area. Findings indicate that Luxembourg households have a favourable opinion with respect to the possible impact of the financial world but a lack of knowledge about this subject, hence the importance of educational action and the key role of the banker. The results of the survey were presented during a press conference. In order to inform and raise awareness of the public on sustainable finance, a "True or False?" campaign was launched asking the public about the veracity of a statement and then providing a detailed answer. Moreover, the CSSF and the Fondation ABBL pour l'éducation financière deal each month with different aspects relating to sustainable finance on the radio and websites of RTL.

During the "Woch vun de Suen", CSSF's agents went into primary school classes to talk about money issues and to conduct an educational game. Activities were also organised in secondary schools, particularly in the framework of the "Fit for Life" programme of the Jonk Entrepreneuren.

In order to raise awareness of young residents about the risks associated with investments in cryptocurrencies, an influencer marketing campaign was carried out. Influencers shared their experience to point out the dangers related to cryptocurrencies to their audience.

Finally, during the World Investor Week, the CSSF published an animation explaining the functioning of the blockchain.

1.2. Financial consumer protection and financial education at international level

1.2.1. Task Force on Consumer Protection of the OECD Committee on Financial Markets

The Task Force's work concerns particularly the G20 High-Level Principles on Financial Consumer Protection. The Task Force, in charge of monitoring their implementation, continued to work on the review of the Principles which started in 2020. Indeed, almost 10 years after the adoption of the Principles, such review was deemed beneficial.

In 2022, the review led to the adoption of two additional Principles, namely "Access and Inclusion" and "Quality Financial Products", and to three cross-cutting themes, namely Financial Well-being, Digitalisation and Technological Advancements as well as Sustainable Finance. The impact of the COVID-19 pandemic on consumers of financial products and services were also included in this review. Since December 2022, the number of G20 High-Level Principles on financial consumer protection amounts to 12.

In 2022, the Task Force also organised two round tables on "Current economic and financial trends and implications for financial consumers – increasing inflation and interest rates" and "Digitalisation: AI and financial consumer protection".

Moreover, the Task Force conducted research on financial consumer protection in the area of sustainable finance.

1.2.2. International Financial Consumer Protection Network (FinCoNet)

FinCoNet is an international organisation gathering supervisory authorities from 28 countries that are responsible for financial consumer protection. FinCoNet aims at fostering information exchange and cooperation between supervisory authorities in order to encourage proper conduct of the market and strong consumer protection in finance.

In 2022, FinCoNet published several documents in the field of protection of financial consumers, including notably the *Report on Supervisory approaches regarding the prevention and management of arrears: Special focus on exit strategies from payment holidays* and the Briefing Note Supervisory challenges relating to the increase in digital transactions, especially payments.

The CSSF, as a member of FinCoNet, also attended two international seminars. The first one was held on 30 March 2022 and concerned sustainable finance through a financial consumer protection lens. The second seminar was held on 23 November 2022 and allowed reviewing the fundamentals and discussing the challenges ahead in the market conduct supervision.

1.2.3. OECD's International Network on Financial Education (INFE)

This international network created by the OECD seeks to promote and facilitate international cooperation between the different participants (politicians, regulators, associations, etc.) involved in financial education at global level. In 2022, 277 institutions from 131 countries were represented in the INFE. A total of 93 authorities, including the CSSF, have the status of full member.

In 2022, the OECD/INFE and the European Commission jointly released the *Financial competence framework for adults in the European Union* which aims to improve the adults' financial skills so that they can make sound decisions regarding their personal finances. To this end, the framework builds upon the G20/OECD-INFE core competencies framework on financial literacy by adjusting it to the EU context, and by integrating digital and sustainable finance knowledge.

The OECD/INFE working group on financial education in the context of ageing population as well as the working group on digital financial literacy continued their work and another working group on financial education and sustainable finance was created in 2022.

Further information about projects and events on the activities carried out by the OECD and the INFE in relation to financial education is available on the website www.financial-education.org.

1.2.4. IOSCO's Committee 8 on Retail Investors

The primary mandate of Committee 8 is to conduct IOSCO's policy work on financial education. Its secondary mandate is to advise the IOSCO Board on issues relating to investor protection and to work on the policy to be adopted in this field.

In 2022, the following reports were published: Retail Investor Education in the Context of Sustainable Finance Markets and Products and Investor Behaviour and Investor Education in Times of Turmoil: Recommended Framework for Regulators based on Lessons Learned from the COVID-19 Pandemic.

1.2.5. Joint Committee Sub-Committee on Consumer Protection and Financial Innovation

The subgroup on financial education of the Joint Committee Sub-Committee of the European Supervisory Authorities on Consumer Protection and Financial Innovation launched the following initiatives in 2022:

- organisation of a high-level conference on financial education and literacy;
- publication of a thematic report on national financial education initiatives on digitalisation, with a focus on cybersecurity, scams, and fraud;
- organisation of a workshop to exchange on the experiences gained and lessons learnt from the financial education initiatives.

2. Alternative dispute resolution

In 2022, the CSSF continued to fulfil its functions as entity competent for the alternative resolution of consumer disputes, which it takes on, in particular, pursuant to the provisions of the Consumer Code. In this respect, the CSSF does not only process requests for the alternative resolution of disputes made by consumers as such, but it also deals with disputes between financial sector professionals in order to provide an amicable resolution.

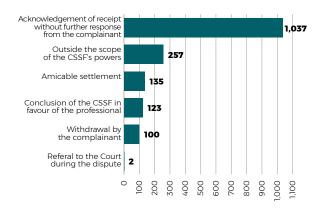
Article L. 432-4 of the Consumer Code provides that the entities qualified for alternative consumer dispute resolution must publish their annual reports. It also determines the information to be included in these reports.

In this chapter, the CSSF informs the public of its activities as qualified entity for alternative consumer dispute resolution, by providing, inter alia, the information required under the aforementioned Article L. 432-4.

2.1. Statistics regarding CSSF complaint handling in 2022

In 2022, the CSSF received 1,705 and closed 1,654 complaint files (including files received before 1 January 2022).





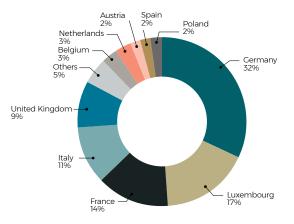
Upon reception of a complaint, the CSSF generally responds with an acknowledgement of receipt which provides useful instructions for the complainant on how to resolve the dispute with the professional without additional intervention of the CSSF. This acknowledgement of receipt indicates, among others, the full name of the manager in charge of handling complaints whom the complainant should contact at the entity concerned in order to reach an amicable settlement, and the link to the CSSF's webpage where useful information on the alternative handling of complaints by the CSSF is available to the complainant. Judging by the high number of disputes closed following these first instructions by the CSSF, the CSSF's approach consisting in favouring the dialogue between the parties to the disputes and not intervening immediately with the supervised entity concerned by a complaint, allows resolving a number of conflicts prior to the alternative dispute resolution procedure.

It should be noted that, in 2022, the CSSF took 92 days, on average, to close a duly examined file.

A total of 257 requests for the alternative resolution of complaints were inadmissible for the following reasons:

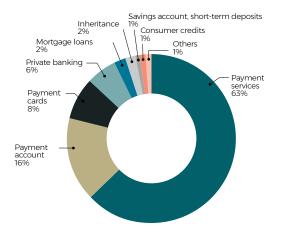
- complaints involving entities that are not subject to the CSSF's supervision (61%)¹;
- failure of the complainant's capacity to act (23%);
- complaints falling within the scope of the insurance sector (5%);
- complaints concerning a non-financial product (5%);
- complaints already heard by a court (3%);
- referral to another alternative dispute resolution body (3%).





There is a large part of complaints from Germany with 32% of the total, which is similar to 2021 (30%), while there was a significant decline in the share of complainants residing in the United Kingdom (9% in 2022 against 17% in 2021). It is also noteworthy that the category "Others" covers 62 different countries.

Breakdown of complaints according to their object



The breakdown of complaints according to their object remained stable compared to the previous years. The major share of complaints (63%) concerned problems linked to the use of electronic payment services. The share of complaints relating to payment accounts (16%) increased as compared to the previous financial year (11% in 2021). The same applies to the share of complaints relating to payment cards (8% in 2022 against 6% in 2021).

Excluding complaints concerning entities of the insurance sector.

2.2. Complaints handled in 2022

The CSSF recounts here some disputes resolved in 2022 which may be rich in lessons for financial consumers and professionals.

2.2.1. Mandate

The CSSF regularly receives complaints involving transactions carried out by proxies of the banks' customers. In such cases, the mandators (customers) are not always aware of the extent of powers they have given to their proxy and often they would complain to their bank and dispute the transactions executed on their behalf by the proxies.

Thus, the CSSF received a complaint in which a customer, who had mandated a third party to represent him in relations with his bank, accused the latter of having executed an order for the transfer of a significant amount given by his proxy without contacting him prior to the execution of the disputed transfer order. Given the refusal of the bank to grant his request, the mandator (customer) contacted the CSSF to assert his rights vis-à-vis the bank.

The complainant brought several arguments forward to convince the CSSF of the validity of the complaint. Thus, he alleged that several circumstances around the disputed transfer order should have alerted the bank and led it to obtain confirmation for the transfer order from the mandator (customer) before executing it. He maintained notably that the transfer order referred to an assistance agreement which was evidently without real subject-matter and that the bank should have noticed the dishonest proxy's subterfuge. Moreover, the mandate was dated several months prior to the assistance agreement to which the disputed transfer order referred. The CSSF also noted that the mandate contract bore no mention of this assistance agreement.

The bank pointed out that it did not have to question a transfer order given by the proxy since the order was consistent with the purpose of the mandate given properly to the proxy by the complainant when the account was opened. It added that the mandate contract did not provide for restrictions with respect to the nature or the amount of the transactions for which the proxy could represent the mandator.

The CSSF had to decide if the bank had disregarded its legal and contractual obligations by executing the disputed transfer order given by the proxy without seeking prior confirmation from the mandator. The documents submitted to the file by the parties to the dispute showed that the disputed transfer order included in the annex a copy of an assistance agreement for which there was a priori no reason to suspect that it did not have a real subject-matter. The CSSF noted in particular that the assistance agreement provided for a compensation of the service provider corresponding to the amount of the disputed transfer. It also found that the mandate contract did stipulate that the proxy was authorised to represent the complainant for any banking transactions, without limits to the amount of these transactions. The CSSF's attention was also caught by the clause under which the proxy accepted full responsibility for the transactions executed in the framework of the performance of the representation mandate.

Furthermore, the CSSF took into account the fact that the complainant was in copy of the email in which the proxy requested the bank to execute the disputed transfer order. However, the complainant contested the disputed transfer order only several weeks after having been informed thereof.

While considering the particular circumstances and the different documents of the file, the CSSF was of the opinion that the bank could not be reproached for executing the disputed transfer order, since it had acted in compliance with the provisions of the mandate given by the complainant to his proxy and no circumstance surrounding the disputed transfer order should have led the bank to question it.

2.2.2. Execution/non-execution of securities transactions

The CSSF is regularly solicited in relation to disputes where the defective execution of market orders or the non-execution of such orders is at issue. The CSSF noticed in particular that the notion of stop-loss market order was not always very well understood by some complainants.

In one such case, the complainant gave a stop-loss order to sell to his bank and requested it to execute the sale on a specific European regulated market while the security was also listed on the US NASDAQ. The complainant's securities were ultimately sold on the European market for a price far lower than the trigger threshold agreed in the stop-loss order to sell. The complainant blamed the bank for having improperly executed his order since it had sold his securities at a price much lower than the trigger threshold set.

The bank explained to the CSSF that it had placed a stop-loss order to sell on the European market indicated by the complainant. Neither at the time the order had been placed, nor at the closing of the European market had the trigger threshold been reached by the security concerned on the European market. Then the security price fell significantly on the US NASDAQ so that the first transaction which took place the following day on the European market was executed at a price below the trigger threshold set by the complainant. Once the trigger threshold was reached, the bank had to sell the securities as soon as there was a demand for these securities. As the security considerably decreased, the securities of the complainant could only be sold at a price clearly below the trigger threshold set by the complainant.

In the light of these circumstances, the CSSF was of the opinion that the complainant could not blame the bank for the execution of his sale order at a price below the trigger threshold. The bank could rightfully deem that it had acted in compliance with its general terms and conditions which stated that a stop order to sell (or buy) securities would be activated as soon as the price of the security reached the specified price, called "stop price", the stop order becoming then a market order executed at the next quoted price. In another case, the complainant blamed his bank for not having sold, at his order, his securities which downgraded following a significant decrease of their rating. He argued that the bank should have sold his securities because he ordered it so and that it was indicated in a section "Questions/Answers" available on the bank's website that the customer holding securities which were downgraded would be authorised to transfer them. The complainant's interpretation of these provisions was that if the securities are downgraded, the bank must sell them at his request.

The bank's point of view was that it had no such obligation as it had not concluded a management contract or an investment advice contract with the complainant who managed his account himself. Moreover, it pointed out that there had not been any buyers interested in purchasing the (downgraded) securities at the price set by the complainant.

During the analysis of the documents submitted by the parties to the dispute, the CSSF noted that the complainant had been informed of the risks associated with the financial instruments at issue. It noted that the complainant had declared, when opening the account, to be an experienced investor with robust trading experience in different types of financial instruments. Moreover, it was undeniable that the bank had not concluded a management contract or an investment advice contract with the complainant.

The CSSF closed the file after concluding that the information published on the bank's website regarding the transfer right of the holder of securities which were downgraded did not mean that the bank had an obligation to find an acquirer for these securities.

2.2.3. Customers victims of fraud

The CSSF regularly receives complaints from customers who were victims of fraud. These customers often blame their bank for not warning them of the danger of making payments in circumstances which, for experienced professionals such as banks, should raise suspicions but which do not appear to be risky for a layperson.

In 2022, the CSSF received a complaint where the complainant indicated to have been the victim of a scam causing damage amounting to several tens of thousands of euros. The complainant had carried out several fund transfers from his bank account, thinking that he was buying virtual currencies from a seemingly honest seller who later turned out to be a fraudster. After realising that he had been deceived, the complainant asked his bank to return the funds that he had transferred to the fraudster, arguing that his bank should have noticed that he had been the victim of a scam and should have advised him against making the disputed payments or refused to execute them in order to protect him. He notably blamed the bank for not having put in place a system to protect customers from fraudulent websites which would have allowed detecting the fraud of which he had been a victim.

The complainant also blamed his bank for not having diligently monitored the disputed transactions executed on his bank account as the disputed payments broke with the usual transactions of the customer and, thus, for having ignored the legal provisions to which it was subject with respect to knowing its customer. The bank should also have checked whether the disputed payments complied with the provisions of the anti-money laundering legislation.

The bank denied the complaints and refuted the arguments of the complainant by pointing out that the disputed transactions had been duly ordered and authorised by the complainant. It defended its position, with supporting documents, that the required authentication protocols had been followed which proved that the disputed transactions had been ordered and authorised by the complainant. It was therefore difficult for the bank to detect that the complainant had been the victim of a scam.

The CSSF's aim was to determine whether there was evidence in the file which could have led the bank to inform the complainant that he was dealing with a fraudster and to warn him. In the light of the account movements (nature and amounts of payments) shown on the complainant's account before carrying out the disputed payments, the CSSF concluded in this specific case that the bank had no reason to warn the complainant of the danger in which he would put himself by executing the transactions.

2.2.4. Compensation for early repayment of mortgage loan

Similarly to the previous years, the CSSF continues to receive complaints concerning compensations for early repayment of mortgage loans.

In one case, the complainants took out a variable-rate loan in 2015 to buy a residential property to be used as main residence. In 2017, they converted their variable-rate loan into a fixed-rate loan and signed to this end new contractual provisions with the bank. At the beginning of 2019, the complainants contacted the bank to find out the amount of the compensation for early repayment if they reimbursed the loan at that moment. They claimed that the bank answered them that the compensation for early repayment would amount to about EUR 16,000.

At the end of 2020, the complainants asked their bank to communicate them in writing the sum due for the compensation for early repayment in case the residential property is sold. The bank informed them then that the compensation amounted to about EUR 90,000. As they did not agree with that amount, the complainants accused the bank of breaching the legal provisions relating to mortgage credit agreements as laid down in the Law of 23 December 2016 on credit agreements for consumers relating to residential immovable property (hereinafter the "Law"). The first issue that the CSSF had to decide on concerned the legal nature of the contractual provisions by which the complainants converted the rate of the loan agreement from variable into fixed. Should these provisions be considered as a new contract or do they constitute a (mere) amendment to the initial mortgage credit agreement?

Indeed, if the new provisions concerning the conversion of the interest rate constitute a new mortgage credit agreement, they would fall within the scope of the Law whose Article L. 226-20 provides for a cap on the amount of the compensation for early repayment, namely the value corresponding to six months of interests on the capital repaid during each early repayment, calculated at the borrowing rate applicable to the mortgage credit agreement on the day of the early repayment, provided that the amount of the early repayment does not exceed EUR 450,000. However, if the new provisions are deemed not to be a new agreement but an amendment to the initial agreement concluded in 2015, they would not fall within the scope of the Law whose Article L. 226-45 lays down that it does not apply to mortgage credit agreements existing before 21 March 2016. From a practical perspective, it means that if the Law is not applicable to the new provisions agreed between the parties in 2017, the amount of the compensation for early repayment can be set without applying the cap provided for in the Law.

The CSSF noted that the new provisions signed by the parties during the conversion of the interest rate expressly stipulated that any other clauses or provisions of the initial loan agreement remained unchanged. Consequently, it concluded that the 2015 loan agreement remained applicable and that the new contractual provisions introduced two years later could not change this situation and make the Law applicable to the loan agreement in question. The second issue that the CSSF had to deal with was to determine if the bank could ask, at the end of 2020, a compensation for early repayment amounting to almost EUR 90,000 whereas it announced two years earlier that the amount of the compensation would be EUR 16,000.

The bank explained to the CSSF that in 2020, the rates decreased significantly on the interbank market compared to the level of the rates in February 2019 and that this significant decrease, combined with a residual maturity of the loan agreement's fixed-rate period that was still quite long, caused a great increase of the loss on the bank's refinancing. These circumstances explained why the compensation for early repayment was estimated by the bank at EUR 90,000.

The CSSF noted that the bank had duly informed the complainants of the method used to calculate the compensation of early repayment and checked that the amount calculated by the bank was correct according to this method which the CSSF did not deem reprehensible. It should be pointed out that the validity of the first estimated amount of the compensation for early repayment had been expressly limited to about 10 days, so that it was no longer applicable at the time the complainants requested the following estimate of the compensation for early repayment.

Based on these elements, the CSSF concluded that the complainants' claims were not substantiated.

2.2.5. Dispatch/reception of mail from the bank

In many complaints that the CSSF receives, the matter at issue is the dispatch and reception of mail. This was the case for a couple of complainants residing in Central America who blamed their bank for terminating the business relationship without informing them thereof. The complainants declared to the CSSF that they had been informed of the account termination only six months after the effective closing of the account, during a telephone conversation with their advisor from the bank.

The bank explained to the CSSF that it had sent a termination letter by post at the address of the complainants recorded in its books. It argued that the general terms and conditions accepted by the complainants laid down that the communications of the bank were deemed to have been correctly made when sent to the last address indicated by the customer.

By examining the complaint file, the CSSF noted that only a few days before the dispatch of the termination letter by the bank, the complainants had sent an email to the bank stating that it was not necessary to send mail, even by registered letter, to their residence in Central America as their experience showed that the mail did not reach the destination. To remedy this situation, the complainants had asked the bank to send their mail to a trusted person residing in Europe. In the light of this email, the CSSF was of the opinion that the bank had been duly informed that the address in their country of residence should not be used to send mail.

Given the problems to deliver mail to the complainants' residence, the bank finally agreed to extend the notice period in order to allow the complainants to close their accounts under acceptable conditions, starting on the day of the telephone conversation during which they were informed of the termination of the business relationship.

2.3. FIN-NET

FIN-NET was launched in 2001 by the European Commission with the purposes of enhancing cooperation between national ombudsmen in financial services and offering consumers easy access to extra-judicial mechanisms for alternative dispute resolution in the area of financial services.

In 2022, the CSSF took part in two FIN-NET plenary meetings. FIN-NET members exchanged their views on some topical issues, including the European regulation on markets in crypto-assets (MiCA Regulation) whose purpose is, among others, to reduce fraudulent activities in the area of virtual currencies by submitting crypto-asset issuers and service providers to authorisation and supervision by competent authorities.

In addition, FIN-NET informed its members of the review of Directive 2013/11/EU of 21 May 2013 on alternative dispute resolution for consumer disputes made necessary by the need to adapt this directive to the rapid technological developments and to make the alternative dispute resolution procedure more efficient and simpler.

FIN-NET also discussed the detection and prevention of frauds enabled by the use of new means of payment (for instance, phishing, spoofing, SIM swap fraud or man-in-the-browser attack) and of which the financial consumers are increasingly becoming victims. XXIII. Procedure for reporting breaches of financial sector regulations to the CSSF (whistleblowing)



1. Presentation of the reporting procedure

1.1. Introduction

Since September 2014, a communication tool designed as an electronic form¹ and a dedicated email address (whistleblowing@cssf.lu) have been in place at the CSSF in order to allow whistleblowers, i.e. any person acting in good faith and especially persons working or who have worked for an entity of the Luxembourg financial sector, to report to the CSSF, in a confidential and secure manner, potential breaches of applicable regulations committed by or within entities supervised by the CSSF (reporting or whistleblowing)².

Information on the whistleblower's identity and on the reported facts, including the identity of any third parties who may be involved, is treated with utmost confidentiality by any CSSF agent who has knowledge of it. This confidentiality is essential to create a trust environment that is conducive to reports being made in good faith by whistleblowers, without fear of retaliation notably by their employer, where applicable.

Anonymous reports are also accepted by the CSSF. However, any reporting person is requested to communicate at least contact details (anonymous or not) or any means of contact so that the CSSF may, where appropriate, be able to ask for additional information necessary to adequately address the issues raised.

1.2. Legal and regulatory context

1.2.1. Legal and regulatory framework in force

The implementation of the reporting mechanism fits into the context of regulatory developments, notably at EU level and more specifically based on Article 71 of Directive 2013/36/EU, and the practices of the national competent authorities from other Member States. This framework was supplemented by other European provisions, such as Regulation (EU) No 596/2014 of 16 April 2014 on market abuse.

This obligation and its corollaries were transposed into most of the sectoral laws applicable to the financial sector notably by the following provisions:

• Article 58-1 of the Law of 5 April 1993 on the financial sector, with respect to reports

¹ https://whistleblowing.apps.cssf.lu/index.html?language=en

² In addition, an FAQ is available on the Whistleblowing page of the CSSF website (https://www.cssf.lu/wp-content/uploads/ whistleblowing_EN.pdf).

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of potential or actual infringements of Regulation (EU) No 575/2013, of Regulation (EU) No 600/2014, of the aforementioned law and of their implementing measures;

- Article 36(7) of the Law of 23 July 2016 concerning the audit profession;
- Article 8 and Annex 1 of the Law of 23 December 2016 on market abuse;
- Article 149b of the Law of 17 December 2010 relating to undertakings for collective investment;
- Article 58-10 of the Law of 10 November 2009 on payment services, with respect to reports to the CSSF of breaches of Regulation (EU) 2015/847;
- Article 46 of the Law of 30 May 2018 on markets in financial instruments;
- Article 8-3 of the Law of 12 November 2004 on the fight against money laundering and terrorist financing, introduced by the Law of 25 March 2020.

In addition to these provisions, the CSSF undertakes to maintain strict confidentiality requirements during the processing of the reports received in order to offer a secure communication space for possible whistleblowers.

1.2.2. Directive (EU) 2019/1937 on the protection of persons who report breaches of Union law

Directive (EU) 2019/1937 on the protection of whistleblowers³ is an initiative launched by the EU with the aim of creating a common framework introducing a general protection for whistleblowers not limited to the financial sector. The text establishes rules and procedures to protect against possible retaliation the individuals who report information they acquired in a work-related context on breaches of EU law in key policy areas. Breaches include both unlawful acts or omissions and abusive practices. Thus, the directive supplements the specific financial laws which already exist.

The transposition of the text into Luxembourg law (draft law submitted to the Chamber of Deputies on 10 January 2022⁴) should ratify the legal definition of whistleblower providing for a clear and protected status for all the persons fulfilling the established criteria.

Currently, and pending the entry into force of the draft law transposing the aforementioned directive, the CSSF endeavours to follow and apply the principles laid down in the European text at the level of the reporting mechanism it has implemented as well as of its internal procedures.

1.3. Confidentiality principle

The CSSF is committed to protecting the whistleblower's identity within the limits of the applicable legislation. In other words, neither the identity of the reporting employee, nor the identity of any third parties who may be involved, will be disclosed to the entity concerned.

The identity of the whistleblower or of third parties will only be disclosed in circumstances in which the disclosure becomes unavoidable in law (e.g. as a result of the CSSF's duty to inform the State Prosecutor if the acts may constitute a crime or an offence⁵, or in the context of criminal proceedings against the entity concerned in which case the whistleblower may, as the case may be, be called as a witness).

Although it may not always be entirely excluded, despite all the precautions taken, that the employer discovers the whistleblower's identity by cross-checking information, the CSSF will of course make every effort to protect it which implies that strict internal procedures are implemented and followed by all of its agents.

⁴ Draft law transposing Directive (EU) 2019/1937 of the European Parliament and of the Council of 23 October 2019 on the protection of persons who report breaches of Union law, Parl. Doc., No 7945 (https://www.chd.lu/fr/dossier/7945)

³ Directive (EU) 2019/1937 of 23 October 2019 on the protection of persons who report breaches of Union law, OJ L 305, pp. 17-56 (http://data.europa.eu/eli/dir/2019/1937/oj)

⁵ Obligation under Article 23(2) of the Code of Criminal Procedure and under point (2) of Article 74-2(4) of the Law of 7 March 1980 on the organisation of the judicial system

1.4. Professional secrecy and reply to the whistleblower

Professional secrecy laid down in Article 458 of the Penal Code to which the CSSF is subject⁶ prohibits communicating the outcome of the analysis of a report to the informant. However, the CSSF publishes (on a named or anonymous basis, according to the context and applicable law) the measures and sanctions imposed on the entities, including those resulting from investigations carried out following a report, without providing the trigger event.

1.5. Whistleblowing and Single Supervisory Mechanism (SSM)

A similar reporting mechanism as well as rules on the cooperation with national authorities with regard to the transmission and processing of reports was introduced at the ECB level (as per Article 23 of Regulation (EU) No 1024/2013 of 15 October 2013 and Articles 36 to 38 of Regulation (EU) No 468/2014 of 16 April 2014).

Whistleblowers are requested to use the whistleblowing procedure at the ECB⁷ to report breaches by significant banks within the meaning of the SSM⁸. In case the CSSF receives a report concerning a significant bank, it forwards that report to the ECB and informs the whistleblower thereof.

Reports received by the CSSF in respect of a breach of ECB's regulations or decisions by a less significant supervised entity (within the meaning of the SSM) are forwarded to the ECB without communicating the whistleblower's identity, unless the whistleblower provides their explicit consent.

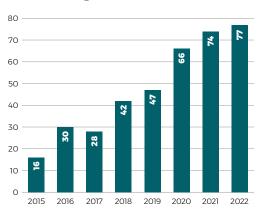
The ECB treats all the reports confidentially in compliance with the EU data protection framework and ensures appropriate protection for the reporting party and the accused party.

2. Statistical data for 2022

2.1. Number of reports received and communication channels

In 2022, the CSSF received 77 new reports via different communication channels (official channels, i.e. contact form or dedicated email address, or others). This number confirms an upward trend which has been observed since the implementation of the reporting procedure, indicating the public's growing interest in the possibility to report potential disruptions within the Luxembourg financial sector and some degree of trust in the CSSF's ability to respond to problematic situations.

Although the relevance of the reports received remains variable, the CSSF notes nevertheless that the reporting mechanism allows, each year, collecting useful information and opening or providing input for ongoing investigations.



Most of the messages received are communicated by means other than the CSSF's reporting procedure (for instance, via other email addresses of the CSSF). Apart from the fact that the communication through other channels may extend the processing time of the message, the use of the dedicated procedure allows above all ensuring the application of strict confidentiality rules necessary in the light of the sensitivity of the transmitted information. The CSSF insists on the importance and efficiency for the whistleblowers to transmit the information they wish to share by using the dedicated procedure available on the CSSF website.

Number of messages received⁹

⁶ Cf. Article 16 of the Law of 23 December 1998 establishing a financial sector supervisory commission ("Commission de surveillance du secteur financier")

⁷ https://www.bankingsupervision.europa.eu/banking/breach/ html/index.en.html

⁸ https://www.bankingsupervision.europa.eu/banking/list/html/ index.en.html

⁹ The messages received which are clearly not whistleblowing reports are not counted.

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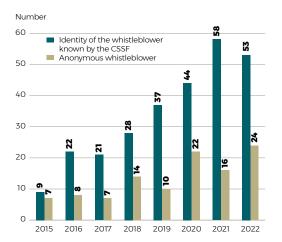
Year	Yes	No
2015	13%	88%
2016	37%	63%
2017	50%	50%
2018	40%	60%
2019	45%	55%
2020	36%	64%
2021	36%	64%
2022	42%	58%
Total	39%	61%

Messages transmitted through the CSSF's whistleblowing procedure

2.2. Whistleblowers

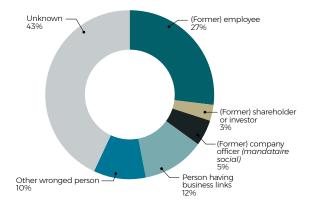
During the last years, the CSSF noted a decrease of anonymous reports in favour of messages where informants are identified, confirming again the existence of a certain trust in the CSSF within the Luxembourg financial sector.

Identity of the whistleblower



Since the implementation of the whistleblowing procedure, over a quarter of the reports transmitted have come from employees (or former employees) of the financial sector. However, the CSSF emphasises that the other sources are not to be disregarded; therefore, access to the reporting mechanism must not be restricted solely to persons who have an employment agreement with the person or entity concerned. The CSSF's intention is indeed to allow any person acting in good faith who has information that may be relevant to be heard, irrespective of their status.

Whistleblower's connection to the person concerned

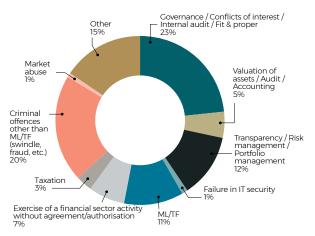


It is noteworthy that the high percentage of unknown connections is closely correlated with the anonymity of a portion of the reports received.

2.3. Nature of the reported failures/breaches

Around one quarter of the reports received concerned potential governance issues within supervised entities (for instance, reconsideration of the good repute and/or professional experience of current *dirigeants* (managers), possible conflicts of interest, disruptions in the internal organisation of the entity), followed by messages describing possible failures regarding transparency, risk management and portfolio management. Many messages received concerned AML/CFT issues, or at least included an element pertaining to this topic. As a significant portion of the reports concerned in fact potential criminal offences (around 20%), it is reminded that the CSSF is not competent in this matter and that any information that may lead to the opening of a judicial criminal investigation may be communicated to the Prosecutor's Office of Luxembourg for analysis.

Nature of the reported failures



Finally, it should be made clear that the CSSF is not competent to deal with private disputes¹⁰ and does not provide legal advice in this context.

2.4. Actions taken in response to the reports received

The CSSF thoroughly and carefully analyses each message received in the framework of the whistleblowing procedure in order to provide the most appropriate response to the information received. As it is subject to professional secrecy, the CSSF cannot inform whistleblowers about the outcome of the analysis and about the actions taken, if any.

Nevertheless, in order to provide the public with an overview of the potential responses, a summary of the CSSF's decisions regarding the reports received since the implementation of the whistleblowing procedure is presented below.

Actions taken in response to the reports received

Response	% of total
Allegations do not fall in the scope of the CSSF's supervision (entity not supervised, competence of another authority)	22%
Insufficient information for the CSSF to conduct an investigation (for instance, whistleblower's silence)	14%
Alleged failures that could not be confirmed or that proved to be false following an investigation or inquiry by the CSSF	14%
Information useful for an ongoing supervisory mission of the CSSF	12%
Referral to the Prosecutor's Office of Luxembourg (ML/TF, tax fraud, etc.)	8%
Opening of an investigation	8%
Others (for instance, facts not relevant or not serious)	8%
No territorial competence of the CSSF - coordination with the competent supervisory authority	6%
Information already known by the CSSF	3%
Restoration of compliance by the professional concerned following the CSSF's inquiry	3%
Reported failures corrected by the professional without the CSSF's intervention	1%
Publication of a warning	1%

10 Except for mediation conducted by the CSSF in the framework of customer complaints (cf. https://www.cssf.lu/en/customer-complaints/)

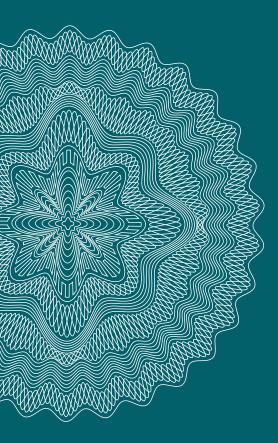
List of abbreviations

2010 Law	Law of 17 December 2010 relating to undertakings for collective investment	
2013 Law	Law of 12 July 2013 on alternative investment fund managers	
ABBL	Luxembourg Bankers' Association	
AIF	Alternative Investment Fund	
AIFM	Alternative Investment Fund Manager	
AIFMD	Directive 2011/61/EU of 8 June 2011 on Alternative Investment Fund Managers	
ALFI	Association of the Luxembourg Fund Industry	
AML/CFT	Anti-Money Laundering and Countering the Financing of Terrorism	
ASSEP	Pension savings association	
Audit Law	Law of 23 July 2016 concerning the audit profession	
BCL	Banque centrale du Luxembourg - Luxembourg Central Bank	
BMR	Benchmark Regulation - Regulation (EU) 2016/1011 of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds	
BRRD Law	Law of 18 December 2015 on the failure of credit institutions and certain investment firms	
BRRD	Bank Recovery and Resolution Directive - Directive 2014/59/EU of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms	
BRRD2	Bank Recovery and Resolution Directive 2 - Directive (EU) 2019/879 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	
CPDI	Conseil de protection des déposants et des investisseurs - Council for the Protection of Depositors and Investors	
CRD V	Capital Requirements Directive V - Directive (EU) 2019/878 of 20 May 2019 amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures	
CRR	Capital Requirements Regulation - Regulation (EU) No 575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms	
CRR2	Capital Requirements Regulation 2 - Regulation (EU) 2019/876 of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012	
CSD	Central Securities Depository	
CSDR	Central Securities Depositories Regulation - Regulation (EU) No 909/2014 of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories	
CSSF	Commission de Surveillance du Secteur Financier - Luxembourg supervisory authority of the financial sector	
CdRS	Comité du risque systémique - Systemic Risk Board	
DLT	Distributed Ledger Technology	
EBA	European Banking Authority	
EC	European Community	
ECB	European Central Bank	
EEA	European Economic Area	
EIOPA	European Insurance and Occupational Pensions Authority	
EMIR	European Market Infrastructure Regulation - Regulation (EU) No 648/2012 of 4 July 2012 on OTC derivatives, central counterparties and trade repositories	
ESEF	European Single Electronic Format	
ESG	Environmental, Social and Governance	
ESMA	European Securities and Markets Authority	
ESRB	European Systemic Risk Board	
EU	European Union	
EUR	Euro	
FATF	Financial Action Task Force	
FGDL	Fonds de garantie des dépôts Luxembourg - Luxembourg Deposit Guarantee Fund	
FIU	Financial Intelligence Unit	

FSB	Financial Stability Board	
ІСТ	Information and Communication Technology	
IFD	Directive (EU) 2019/2034 of 27 November 2019 on the prudential supervision of investment firm and amending Directives 2002/87/EC, 2009/65/EC, 2011/61/EU, 2013/36/EU, 2014/59/EU and 2014/65/EU	
IFM	Investment Fund Manager	
IFR	Regulation (EU) 2019/2033 of 27 November 2019 on the prudential requirements of investment firms and amending Regulations (EU) No 1093/2010, (EU) No 575/2013, (EU) No 600/2014 and (EU) No 806/2014	
IFRS	International Financial Reporting Standards	
IMF	International Monetary Fund	
IORP	Institution for occupational retirement provision	
IOSCO	International Organization of Securities Commissions	
ISA	International Standard on Auditing	
ITS	Implementing Technical Standards	
JST	Joint Supervisory Team	
LSI	Less significant institution	
MiFID	Markets in Financial Instruments Directive - Directive 2014/65/EU of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU	
MIFIR	Markets in Financial Instruments Regulation - Regulation (EU) No 600/2014 of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012	
ML/TF	Money Laundering and Terrorist Financing	
NAV	Net Asset Value	
OECD	Organisation for Economic Co-operation and Development	
PFS	Professional of the Financial Sector	
PIE	Public-Interest Entity	
PSD2	Directive (EU) 2015/2366 of 25 November 2015 on payment services in the internal market	
REA	Réviseur d'entreprises agréé - Approved statutory auditor	
RTS	Regulatory Technical Standards	
SEPCAV	Pension savings company with variable capital	
SFDR	Sustainable Finance Disclosure Regulation - Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector	
SFTR	Securities Financing Transactions Regulation - Regulation (EU) 2015/2365 of 25 November 2015 on transparency of securities financing transactions and of reuse	
SI	Significant institution	
SICAR	Investment company in risk capital	
SIF	Specialised Investment Fund	
SIIL	Système d'indemnisation des investisseurs Luxembourg - Investor Compensation Scheme Luxembourg	
SRB	Single Resolution Board	
SREP	Supervisory Review and Evaluation Process	
SRM	Single Resolution Mechanism	
SSM	Single Supervisory Mechanism	
STOR	Suspicious Transaction and Order Report	
UCI	Undertaking for Collective Investment	
UCITS Directive	Directive 2009/65/EC of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS)	
UCITS	Undertaking for Collective Investment in Transferable Securities	
VASP	Virtual Asset Service Provider	

Notes





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