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Ten years after the financial crisis, Luxembourg banks are well capitalised and their solvency and liquidity ratios exceed the minimum requirements. The investment fund industry is growing steadily. Nevertheless, we are not immune to a new economic or financial crisis; the Capital Market Union is far from being completed and the rapid technological changes and digitalisation which spread to the real economy also affect the financial sector. The sector must deal with great challenges: low profitability, outdated information systems, staff inadequately trained on the new environment and on customer and investor expectations, new market entrants and new risks.

To address these challenges, the CSSF focussed its action on the following priorities:

· Consumer and investor protection

This core mission of the CSSF cuts across all activities under its supervision and the CSSF ensures, in particular, compliance with the obligations on transparency and under MiFID II. Unsophisticated or retail consumers should get special attention with regard to speculative or risky products. Therefore, in 2019, the CSSF prohibited the sale of binary options to these customers and issued restrictions regarding contracts for difference. The CSSF also pursued its efforts in financial education, notably by launching a dedicated website *letzfin.lu*, educational games and applications, as well as tools for better management of the family budget and pocket money. The best way to protect consumers is to teach them, and this process must start as early as possible, namely in schools where the CSSF participated in awareness-raising campaigns.

· Financial innovation and digitalisation

Digitalisation and FinTech are topics of importance to the CSSF. Hence, the CSSF established a permanent dialogue with the market, took part in many conferences as speaker or participant, was attentive to new projects at an early stage, published guidance, like the white paper on artificial intelligence (Artificial Intelligence: Opportunities, risks and recommendations for the financial sector) and worked continuously on the adaptation of the supervisory framework (e.g.: modernisation of the framework with respect to the use of cloud in sectors under its prudential supervision) and all this in a context of increased digitalisation and interconnectivity.



In 2019, particular focus was put on ICOs, the new payment services under PSD2, as well as the KYC utilities. The CSSF has active bilateral exchanges with other authorities either in the context of cooperation agreements or within international working groups, like EFIF (European Forum for Innovation Facilitators) and GFIN (Global Financial Innovation Network). It also contributed to the work of European authorities as, for example, the report of the EBA on Big Data and Advanced Analytics. Finally, the CSSF remains vigilant on risks associated with digitalisation and with the increasing dependence on information systems, as well as on the major risk of cybercrime.

Fight against money laundering and terrorist financing

One of the CSSF's tasks is to contribute to the financial stability which is sometimes undermined by financial crime and, in particular, money laundering and terrorist financing. This subject is not new; nevertheless, it resonates more than ever, since new players, for instance in the area of virtual currencies, could misuse the financial system for money laundering purposes. The AML/CFT supervision is carried out on a risk-based approach and will be extended to professionals dealing with virtual assets pursuant to the Vth AML Directive. The CSSF further developed its risk-based approach which led to the publication of sectoral risk analyses and it identified notably private banking as a high-risk sector. It also implemented working groups with AML/CFT experts from the CSSF, the supervised sector and the Financial Intelligence Unit (FIU) and intensified its awareness-raising campaigns, notably by organising sectoral conferences.

· The review of business models

The profitability risk remains critical for many banks and other supervised entities in Luxembourg as well as in Europe. This risk is due to a range of factors: volume of activity lower than the critical mass for some, constant pressure on profitability, especially on net interest income, operational expenditure that is greater than the operational income, in particular, as a result of the cost of the regulations, the increase of salaries in the financial sector, as well as the extensive investments in the modernisation of IT systems and digitalisation. There are many banks and private portfolio managers in Luxembourg and it is expected that the small entities and those which do not adapt their business models to the customers' expectations and to the digital world will disappear. The CSSF supervises the risk associated with business models in the framework of the protection of depositors and investors.

· Risks associated with climate change

The risks associated with climate change and environment became one of the main risk factors in the longer term, as indicated in the last edition of the Global Risks Report of the World Economic Forum. The Single Supervisory Mechanism of the euro area conducted two important surveys in 2019 in order to gain insight on the banks' situation with respect to the incorporation of climate-related and environmental risks in their business strategy, their risk management and their governance frameworks. This work will continue in 2020 with the communication of supervisory expectations. The Green Deal of the European Commission requires the mobilisation of both private and public investments. The European regulations on Disclosure, Benchmark and Taxonomy will improve the classification of sustainable investments, avoiding, thus, greenwashing which has a detrimental effect on investor confidence. The Green Deal cannot be achieved without sustainable finance; therefore, the CSSF is ready to support the transition to sustainable finance, both at national and international level, for instance, within the Network for the Greening of the Financial System of which it is member. An economy based on ESG criteria will be more resilient and a sustainable economy goes hand in hand with sustainable finance. With almost EUR 5,000 billion of assets under management in Luxembourg, the country can play a key role if most of the players shift their

priority from avoiding or limiting risks associated with unsustainable investments to integrating sustainable investments in their business strategy and considering them as an opportunity. A substantial effort to educate consumers, investors and also financial sector players will be needed and can be integrated in the CSSF's mission of financial education. The remuneration models should include a sustainability component in the objectives of managers of the financial sector players.

In order to face all these challenges, the CSSF has embarked on a modernisation programme since 2018, called CSSF 4.0. This programme has four goals: effectiveness, transparency, improved interaction with the market and risk management. It includes a technological dimension with, for example, the use of big data and artificial intelligence, an organisational dimension based on lean and agile organisation and a human dimension with a strong focus on training (the agents benefitted from 41,000 hours of training in 2019).

However complex and comprehensive the norms are and in so far as it is possible to make good use of the technology to fulfil our missions, our agents will always be the heart of our institution. Therefore, I would like, here, to sincerely thank them for the excellent work they have carried out throughout 2019.

Claude Marx Director General

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Chapter I

Governance and functioning of the CSSF



1.1. CSSF Board

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.

CSSF Board composition

Chairwoman	Maureen Wiwinius
Members	Daniel Croisé Serge de Cillia Yasmin Gabriel
	Camille Thommes Pascale Toussing Claude Wirion
Secretary	Danielle 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

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 missions 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.

Council for the Protection of Depositors and Investors composition

Chairman	Claude Wampach
Members	Bob Kieffer Gaston Reinesch Serge de Cillia (until 15 May 2020) Karin Guillaume
Secretary	Laurent Goergen

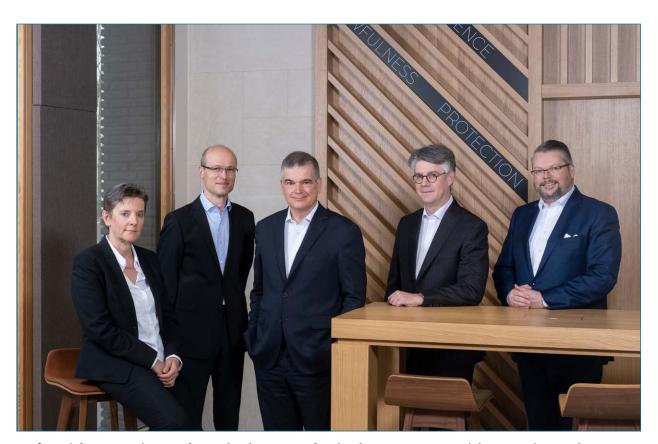
it sets up a five-year "target contract" with the Minister of Finance. The Executive Board is responsible for the reports and proposals it is obliged to address to the Board and the Government.

Executive Board composition

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

1.4. Executive Board

The senior executive authority of the CSSF is the Executive Board, composed of a Director General and of 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,



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

1.5. Consultative Committee for Prudential Regulation

The Government may seek advice from the committee, constituted by the Law of 23 December 1998 establishing a financial sector supervisory commission (Commission de Surveillance du Secteur Financier), on any draft law or grand-ducal regulation in the field 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 issues.

Consultative Committee for Prudential Regulation composition

Executive Board of the CSSF	Claude Marx (Chairman) Françoise Kauthen Jean-Pierre Faber Marco Zwick Claude Wampach
Members	Marc-André Bechet Guy Hoffmann Robert Scharfe 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 regulation of public oversight of the audit profession overall or for specific issues.

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	Anouk Agnes Daniel Croisé Philippe Meyer Andy Pepin Gilles Pierre Daniel Ruppert Philippe Sergiel Anne-Sophie Theissen Claude Wirion
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 issues.

Consultative Committee for Resolution composition

Resolution Board	Romain Strock (Chairman) Karin Guillaume Bob Kieffer Gaston Reinesch Claude Wampach
Members	Jean-Louis Barbier Claude Eyschen Thierry Lopez Gilles Pierre 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 areas of the financial sector, give their advice on any issue relating to their activities and contribute to the drawing-up and interpretation of the regulations relating to 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

CSSF members: Claude Marx (Chairman), Frank Bisdorff, Jean-Pierre Faber, Carlo Felicetti, Jean-François Hein, Françoise Kauthen, Karen O'Sullivan, Guilhem Ros, Patrick Wagner, Claude Wampach, Marc Weitzel, Marco Zwick, Nadine Holtzmer (Secretary)

External members:

Rima Adas, Catherine Bourin, Max Braun, Evelyne Christiaens, Patrick Conrardy, Elsa Dorschel, Romain Felten, Jean Fuchs, Thierry Grosjean, David Lentz, Luc Neuberg, Michel Turk, Carlo Zwank

Investment Fund Managers Committee

CSSF members:

Marco Zwick (Chairman), Pascal Berchem, Irmine Greischer, Jean-Paul Heger, François Hentgen, Alain Hoscheid, Laurent Van Burik, Rudi Dickhoff (Secretary)

External members:

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

· 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

· Financial Consumer Protection Committee

CSSF members:

Claude Marx (Chairman), Danièle Berna-Ost, Jean-François Hein, Isabelle Jaspart, Patrick Hommel (Secretary)

External members:

Karin Basenach, Catherine Bourin, Susana Canaria, Stéphanie Damge, Kevin Everard, Guy Goedert, Marc Hengen, Bob Kaempff, Gilles Rod, Tania Lagoda, Yannick Majerus, Jean Medernach, Marc Muller, Romain Nehs, Marc Pauly, André Prüm, Marie-Josée Ries, Monique Rodesch, Katia Texeira Martins, Camille Thommes, Jessica Thyrion, Maureen Wiwinius

· Audit Technical Committee

CSSF members:

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

External members:

Yohan Blaise, Bettina Blinn, Sylvie Testa, Christelle Bousser, Olivier Lefèvre

2. Human resources

2.1. CSSF staff

The number of CSSF agents has been growing steadily since 2009. This evolution has to be considered in the context of the extension of the tasks conferred upon the CSSF. The staff's growth was made possible through the opening to EU nationals of the Luxembourg Civil Service careers.

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The year 2019 confirmed this trend with the recruitment of 94 new agents. In parallel, the CSSF faced the departure of 31 agents during the year, which resulted in a positive net balance of 63 agents and expanded the CSSF staff to a total of 908 agents as at 31 December 2019 (+7.45%). This is the equivalent of 813 full-time jobs (+8.27%).

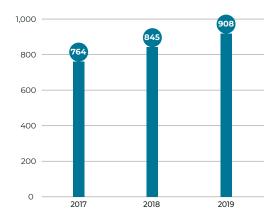
Following the reform within the Luxembourg Civil Service which facilitated part-time work and unpaid leave, the number of agents benefiting from part-time employment, leave in the form of part-time work, parental leave or unpaid leave as at 31 December 2019 rose to 228, i.e. 25.28% of total staff. This is a reflection of the CSSF's willingness to apply a more flexible approach to work organisation, in keeping with the career and family aspirations of its agents.

Within the context of parental leave, it is worth noting that the formula most chosen by the CSSF agents is the leave split into eight hours per week.

In 2019, the CSSF analysed 4,664 application forms (+53%). Recruitment effort focused on IT profiles and strengthening of support and UCI functions.

To continue to heighten its visibility among the general public and university students at the end of their studies, the CSSF attended recruitment events such as UniCareers, Réunion Européenne des Étudiants Luxembourgeois (European Meeting of Luxembourg Students), Plug&Work, Réunion Entreprises-Étudiants (Meeting between Companies and Students) and Dogfinance Connect.

Movements in staff numbers



The CSSF agents operate within a multicultural context. Indeed, the CSSF was one of the precursory public institutions in applying the Law of 18 December 2009 changing the access of EU nationals to the Luxembourg Civil Service. Thus, 17 nationalities are represented among the CSSF staff and all these agents benefit from the same career development opportunities. At this stage, the Luxembourg agents continue to represent the majority of staff with 50.66%.

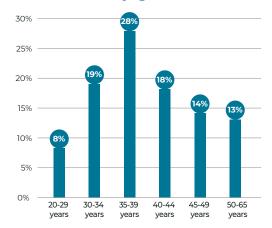
Breakdown of staff by nationality



¹ The Netherlands (0.55%), Austria (0.55%), Romania (0.55%), Bulgaria (0.55%), Poland (0.44%), Greece (0.34%), Finland (0.11%), Sweden (0.11%), Ireland (0.11%), Hungary (0.11%).

The average age of staff members increased slightly to 40.10 years as at 31 December 2019 (39.62 years at the end of 2018). Women make up 46.67% of total staff and men 53.33%.

Breakdown of staff by age



As regards the position of men and women in the hierarchical structure within the CSSF, out of a total of 134 people with hierarchical responsibility, 45 were women (33.58%) and 89 men (66.42%) as at 31 December 2019.

CSSF hierarchy structure

	Women	Men	Total
Director General	0	1	1
Directors	1	3	4
Resolution Director	0	1	1
Heads of department	10	18	28
Deputy heads of department	18	28	46
Heads of division	16	38	54
Total	45	89	134
In %	33.58%	66.42%	100.00%

It is worth emphasising that the share of women in the hierarchical structure increased by 2% as compared to 2018. To the extent possible and in recognition of the institution's growth, the CSSF wishes to ensure career development opportunities for all its agents.

2.2. Training

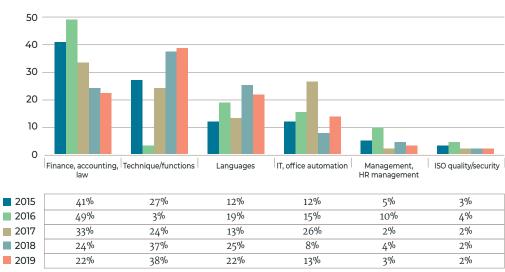
The CSSF is operating in a world that is at the forefront of innovation: the world of finance. Furthermore, the files handled by its agents are highly diverse and complex. Thus, training plays a crucial role in adjusting their skills in order to keep pace with the fast-changing regulatory, organisational and technological environments.

The average number of days of training followed has continuously increased over the last years to reach 7.9 days per agent in 2019, representing a total of 40,908 training hours over the year for the whole institution.

Today, the CSSF offers an extremely broad range of trainings both on technical dimensions (functions and IT) and in management and leadership.

The year 2019 showed a significant increase in training hours in the category "IT/office automation" as compared to 2018. This development is to be seen in the context of the implementation of CSSF strategy 4.0 (cf. point 3 below) aiming, among other things, at extending the use, operation and knowledge of automation and artificial intelligence tools. Consequently, the CSSF has been paying particular attention to its agents' digital curriculum.

Moreover, the CSSF launched an ambitious e-learning programme in 2019 and will continue to develop it.



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. CSSF strategy 4.0

The financial industry is constantly changing and the society's expectations as regards financial market stability keep rising. In this context, it is essential to make new tools and means available to the CSSF agents, and to offer more services to the supervised entities. Conscious of the organisational and skills transition to be established, the CSSF's Executive Board has structured its reflection within CSSF strategy 4.0 with four goals:

- delivering greater efficiency;
- improving external commitment;
- · optimising risk management;
- increasing transparency of and towards the market.

CSSF strategy 4.0 has technological (increased use of new technologies such as digital tools, artificial intelligence and big data) but also organisational and human dimensions. Meeting these challenges leads the CSSF to rely, to a greater extent, on open innovation, collaborative intelligence and agile methods and to improve internal communication and

collaboration. Another area of emphasis going forward is the optimisation of operational processes.

In this context, the following projects were conducted in 2019:

in the area of digital transformation:

- deployment of a UCI dedicated web portal relating, in particular, to application files for authorisation;
- development of a mobile virtual badging application (VIBA University) for students of private companies participating in the réviseur d'entreprises (statutory auditor) training at the University of Luxembourg;
- implementation of the MFT-DropBox solution providing the secure exchange of large data files between the CSSF and supervised entities or government bodies;
- setting-up of mobile material and technological means: laptop and VPN for all;
- first stage of the BI (Business Intelligence) self-service programme with the Microsoft Power BI and Odoo tools, which will arrive in 2020.

within the context of human resources management:

 development of the Payroll module within the integrated management software of human resources, which allows optimising work flows, saving time and decreasing the potential for error;

 implementation of the mobile virtual badging application (VIBA CSSF) enabling the agents participating in on-site inspections at supervised entities to clock in/out remotely at their arrival and departure.

in the area of work process review:

- development of a strategy that encourages listening to the agents expressing their needs with a view to transforming the CSSF in a positive way;
- automation and robotisation of the organisational processes with the relevant departments;
- gradual implementation of the electronic signature of the CSSF documents, facilitating the exchange with the supervised entities and shortening response times;
- expanding application of the Lean Management tool and, in particular, of the daily whiteboarding in order to optimise team interaction, across all hierarchical levels;
- optimisation of on-site review by the CSSF;
- increase in the number of agents certified in Lean Management.

4. Moonlight building layout

In order to address the growing needs for workstations, reception areas and conference rooms, the CSSF rented 67% of the surface of the Moonlight building, adjacent to its head office, the Aubépines building. The CSSF conducted this large-scale project under the theme "Link-up" in order to allow the organisational combination between the two buildings. The most perceptible result of this strategy: the two buildings have been connected by means of a two-story walkway in order to facilitate the movement between the teams and the various departments within the CSSF.

Thinking about new ways of working (New ways of working project) that are more agile, more connected but still just as rigorous, forms an integral part of CSSF strategy 4.0. The internal architecture project was thus preceded by an important phase of consultation with the teams in order for them to bring their vision to the future of the CSSF.

Considerable attention has been paid to the office interior, making it possible to foster collaborative methods and flexibility of workplaces:

- increased acoustic comfort as a key element of the quality of work life;
- · ergonomic and multifunctional furniture;
- workspaces, training and conference rooms in a natural daylight environment;
- increased number, surface and layout of exchange areas;
- enhanced informal exchange spaces.

In so far as the CSSF is one of the guarantors of the seriousness of the financial centre, it had to integrate, in this building, reception areas that are worthy of the international stature of the Luxembourg financial sector. Particular attention has thus also been paid to the quality of these places which are accessible to visitors.

The Moonlight building was inaugurated at an official ceremony held on 4 July 2019 in the presence of Prime Minister Xavier Bettel, Minister of Finance Pierre Gramegna and the Mayor of the City of Luxembourg Lydie Polfer.









5. CSSF social responsibility

Corporate Social Responsibility (CSR) is rooted in the CSSF's mission. Indeed, the organic Law of 23 December 1998, which defines its field of competence, provides that the institution performs its tasks exclusively in the public interest. It contributes to the solidity and stability of the financial sector and is in charge of promoting transparency, simplicity and fairness in the markets of financial products and services.

Moreover, it is responsible for the enforcement of the laws relating to financial consumer protection and the fight against money laundering and terrorist financing. Finally, the Luxembourg government conferred a national mandate on the CSSF as regards financial education, the fight against over-indebtedness and awareness-raising of the pension issue.

Within the framework of its prudential supervisory tasks, the CSSF is conducting a voluntary action aiming at raising awareness among professionals of the financial sector to the challenges linked to digital transformation and environmental problems. Indeed, it is convinced that these dimensions should form an integral part of the corporate strategy and culture of the entities under its supervision. The CSSF's action fits into the COP21 goals and the 17 Sustainable Development Goals of the UN to be achieved. In March 2018, the European Commission presented an ambitious strategy regarding sustainable finance with the objective of promoting transition to a low-carbon economy. Such a transition will be impossible without private sector funding. The relevant roadmap includes a unified classification system for "sustainable" investments, EU labels, and the obligation for asset managers and institutional investors to take into account sustainability in the investment process, the integration of sustainability in the prudential requirements and the disclosure of financial information on climate.

Being socially responsible also means for the CSSF integrating social and environmental issues in its daily management and in its interactions with its different stakeholders, the environment and the civil society at large.

The CSSF has therefore defined different CSR practices and led several initiatives in this respect in 2019.

Hence, it has supported a number of public interest initiatives. In line with its actions taken in 2017 and 2018, it was a partner of the "Orange Week" which aims at raising awareness among the general public about violence against women and girls, and ending gender-based violence. This initiative was co-organised by the Ministry for Equal Opportunities within the framework of the UNITE project of the UN.

Moreover, the CSSF encourages and facilitates the commitment of its agents. Its agents raise funds and collect items (glasses, toys, equipment and children's clothing) for various responsible associations on a regular basis.

In addition, in the context of its financial education mission, the CSSF launched in 2019 its first digital tools, which are equally targeted at young, active or retired people. This concerns, in particular, the new information portal www.letzfin.lu and different applications designed to heighten awareness to daily financial issues among consumers of all ages (for more details, reference is made to point 1.1. of Chapter XX "Financial Consumer Protection").

6. CSSF library

The CSSF library is a reference library which is part of the Luxembourg libraries' network bibnet.lu since 2009. It is specialised in banking and financial law as well as financial economy. It contains around 3,400 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, Monday through Friday from 9 a.m. to 11 a.m. and from 2 p.m. to 4 p.m.

7. CSSF budget and 2019 annual accounts

7.1. CSSF budget

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

The 2019 budget was approved by the Board of the CSSF on 10 December 2018. The key factors that have affected the 2019 budget are the following:

- in order to meet the increasing expectations towards supervisory authorities that have to ensure compliance with ever more complex regulations, the 2019 budget took into consideration the growth in human resources;
- additional office surfaces for 320 agents were rented in the Moonlight building (cf. point 4. above);
- in accordance with the recommendations
 of the Board and within the context of
 CSSF strategy 4.0, special emphasis was
 placed on modern management and
 leadership techniques and on the daily use
 of new technologies by the CSSF agents.
 Consequently, for example, all the agents
 have been equipped with laptops, which is
 one of the elements that enabled the CSSF
 to make 99% of its staff benefit from remote
 working during the Covid-19 health crisis.

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. It should be noted that, as at 31 December 2019, the amount of operating costs and investment costs remained below the budgeted amounts set for 2019.

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7.2. CSSF annual accounts - 2019

BALANCE SHEET AS AT 31 DECEMBER 2019

Assets	EUR
Fixed assets	66,103,879.18
Intangible fixed assets	4,180,493.01
Development costs	661,120.19
Payments on account and intangible assets in progress	3,519,372.82
Tangible fixed assets	61,923,386.17
Land and constructions	50,759,875.20
Other fixtures, fittings, tools and equipment	11,163,510.97
Current assets	75,300,173.38
Debtors	3,629,368.24
Trade debtors with a residual term of up to one year	3,621,872.48
Other debtors with a residual term of up to one year	7,495,76
Cash at banks, in postal cheque accounts, cheques in hand	71,670,805.14
Prepayment and accrued income	5,382,536.78
BALANCE SHEET TOTAL (ASSETS)	146,786,589.34

Liabilities

Own capital	71,561,375.17
Profit brought forward	76,108,169.36
Result for the financial year	-4,546,794.19
Provisions	9,594,187.45
Other provisions	9,594,187.45
Liabilities	65,624,989.22
Amounts owed to credit institutions	58,346,938.32
with a residual term of up to one year	13,773,343.17
with a residual term of over one year	44,573,595.15
Debts on purchases and provision of services	3,832,826.27
with a residual term of up to one year	3,832,826.27
Other debts	3,445,224.63
Tax debts	1,213,696.10
Social security debts	1,324,741.14
Other debts with a residual term of up to one year	906,787.39
Prepayment and accrued income	6,037.50
BALANCE SHEET TOTAL (LIABILITIES)	146,786,589.34

18 - Chapter I - Governance and functioning of the CSSF

PROFIT AND LOSS ACCOUNT AS AT 31 DECEMBER 2019

	EUR
Net turnover	123,940,258.22
Other operating income	173,876.22
Raw materials and consumables and other external charges	21,063,689.98
Raw materials and consumables	495,817.43
Other external charges	20,567,872.55
Staff costs	98,624,459.56
Wages and salaries	92,289,376.70
Social security costs	3,605,855.97
relating to pensions	592,400.25
other social security costs	3,013,455.72
Other staff costs	2,729,226.89
Value adjustments	5,610,950.44
on formation expenses and tangible and intangible fixed assets	5,610,950.44
Other operating charges	2,604,956.81
Other interests and financial revenues	12,500.00
Other interests and financial revenues	12,500.00
Interests and other financial charges	769,371.84
Other interests and financial charges	769,371.84
Result for the financial year	-4,546,794.19

Financial controller EY

Chapter II

The European dimension of the supervision of the financial sector

1. Supervision of banks

1.1. Single Supervisory Mechanism (SSM)

1.1.1. CSSF participation in the governance of the SSM

In 2019, the CSSF participated in 18 meetings of the SSM Supervisory Board and in five meetings of the Steering Committee, and contributed to over 2,300 decisions concerning specific supervised entities. The CSSF also contributed at technical level to the work of about 50 committees and working groups set up by the ECB.

Continuing last years' work on the simplification of SSM processes, the efficiency of the SSM's decision-making process has been further improved by an extension of the delegation framework, which permits that certain types of routine supervisory decisions may be adopted by ECB senior managers instead of the Supervisory Board and the Governing Council. The expanded delegation framework covers decisions on passporting, the acquisition of qualifying holdings and the withdrawal of authorisations of credit institutions.

1.1.2. Developments in banking supervision in the SSM in 2019

Brexit

A topic which continued to require supervisory attention by the SSM in 2019 was Brexit. The SSM mainly focussed on the preparedness of banks and supervisors for a possible no-deal Brexit and the implementation of banks' Brexit plans. Regarding banks intending to relocate to

the euro area, the ECB completed the majority of authorisation procedures related to setting up new, or restructuring existing, credit institutions before the Brexit. Furthermore, the assessment of the Brexit plans of significant institutions with operations in the United Kingdom was completed and the ECB granted the approval of their third-country branches where required under national law, as is the case under Luxembourg law. FAQs on Brexit detailing the SSM's supervisory expectations regarding Brexit, available on the ECB's banking supervision website¹, have been continuously updated during 2019.

Non-performing loans

As regards the ongoing work on non-performing loans (NPLs), the SSM revised² its supervisory expectations for prudential provisioning of new non-performing exposures (NPEs) specified in the 2018 "Addendum to the ECB Guidance to banks on non-performing loans", in order to take into account the adoption of Regulation (EU) 2019/630 which outlines the Pillar 1 treatment for NPEs.

· Credit underwriting criteria

As part of the work on NPLs, the SSM also shifted part of its supervisory focus to the underwriting standards that banks apply when granting loans, with the goal to take proactive measures to limit an excessive build-up of future NPLs. Against this background, the SSM

¹ https://www.bankingsupervision.europa.eu/banking/ relocating/html/index.en.html.

² https://www.bankingsupervision.europa.eu/press/ letterstobanks/shared/pdf/2019/ssm.supervisory_coverage_ expectations_for_NPEs_201908.en.pdf.

launched a data collection exercise in 2019 which should (i) clarify whether banks' credit underwriting standards had deteriorated over time, (ii) identify patterns and uncover specificities in certain loan segments, different business models and across countries and (iii) help determine the adequacy of banks risk aggregation and reporting systems. A follow-up analysis of the collected data will take place in 2020 and the aggregate results from the analysis will be published.

Targeted Review of Internal Models

In the context of the targeted review of internal models (TRIM) which was ongoing during 2019, the ECB published in July 2019 the final chapters of its "Guide to internal models", covering credit risk, market risk and counterparty credit risk³. The risk type-specific chapters complement the guide on general topics published in November 2018. The aim of the three risk type-specific chapters is to ensure a common and consistent approach to the most relevant aspects of the regulations on internal models for banks supervised directly by the ECB.

IT and cyber risk

The SSM continued in 2019 to address IT and cyber risk as a supervisory priority. The SSM's supervisory work in this field builds on a cyber incident reporting process for banks introduced in 2017, on frequent on-site inspections targeting IT and cyber risk, as well as on the ongoing supervision of IT and cyber risk as part of the annual SREP exercise. In this context, the SSM noted that the number of cyber incidents reported in 2019 rose by around 30% and that further improvements are needed by banks regarding IT continuity management, particularly in relation to testing major disaster responses. The SSM also identified several topics that warrant more supervisory focus, in particular the growing number of significant institutions depending on end-of-life-systems for critical business processes, and increasing outsourcing expenses for IT.

· Trading risk and asset valuations

In 2019, the SSM launched a series of coordinated off-site and onsite initiatives in the field of market risk. This includes risks stemming from trading activities and the valuation of financial instruments that are accounted for at fair value. The aim of those initiatives was to (i) ensure compliance with existing regulations, (ii) increase supervisory knowledge about the composition of such financial assets and liabilities, (iii) monitor the areas more exposed to valuation risk and (iv) assess the frameworks used by institutions to calculate fair value and prudent additional valuation adjustments.

· Green finance

As climate-related and environmental risks have been identified as one of the key risk drivers for euro area banks over a longer-term horizon, the SSM conducted in 2019 two surveys covering a total of around 30 significant institutions (representing around 44% of total euro area banking assets) and a number of less significant institutions to gain a better understanding of where banks stand when it comes to incorporating climate-related and environmental risks into their business strategy, their risk management and their governance frameworks. In 2020, the SSM will continue its work on climate-related and environmental risks and formulate and communicate to banks its supervisory expectations on how they should take climate-related and environmental risks into account in their business strategies, governance and risk management frameworks, and on how they should enhance their disclosures to become more transparent in this regard.

Supervisory technology

In 2019, the ECB established a SupTech Hub as a way of introducing innovative tools into its supervisory processes. The ECB has launched various AI projects, including machine learning and advanced data analytics. In 2019, the CSSF, in cooperation with the ECB and other national competent authorities, contributed to the development of an online portal with a view to managing authorisation procedures more efficiently.

³ https://www.bankingsupervision.europa.eu/legalframework/ publiccons/pdf/internal_models_risk_type_chapters/ssm. guiderisktypespecific201907.en.pdf.

Supervision of less significant institutions (LSIs)

While national competent authorities remain responsible for the direct supervision of LSIs, the ECB also has an oversight function for LSIs where it aims to ensure that high supervisory standards are applied across the euro area. In 2019, the ECB continued its implementation of a series of initiatives to foster the consistent application of high-quality supervisory standards to LSIs.

1.2. European Banking Authority (EBA)

1.2.1. Supporting EBA's work on the transposition of Basel III

In 2019, upon a call for advice from the European Commission⁴, the EBA carried out impact studies and issued advices on the implementation of the Basel III standards in Europe. Thus, the EBA issued a first technical advice⁵ in August 2019 and an additional advice⁶ in December 2019. "The EBA notably analysed the impact of its advice to apply a floor to risk-weighted assets (output floor) in relation to credit risk at individual and sub-consolidated levels of banks (in addition to an application at consolidated level).

In its technical advices, the EBA recommended to the European Commission to fully implement the new Basel III standards into the European regulatory framework which, according to the quantitative study of data from 189 European banks, will increase the minimum capital requirement by 23.6% on average in Europe. A full implementation of the Basel III standards in Europe is essential to contribute to the credibility and stability of the EU banking sector while ensuring a well-functioning global banking market.

In this context, the CSSF provided input to the EBA as regards the calibration and choice of the recommended prudential measures as well as the processing and analysis of the quantitative data provided by the banks.

4 Internet link: "Call for Advice to the EBA on the final elements of the Basel III framework".

Building on the EBA's analyses, the European Commission is currently drawing up proposals for the future European regulatory framework (CRD6/CRR3) that applies to banks, and initiated, in October 2019, preliminary discussions within the expert group of the European Commission. In this context, the CSSF provided technical expertise to the Luxembourg Ministry of Finance.

1.2.2. Brexit: implementation of a platform for the transitional regime for British entities

The year 2019 was marked by the entry into force of the laws of 8 April 2019 regarding measures to be taken in relation to the financial sector in the event of a withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union (the Brexit Laws). The Brexit Laws aimed at anticipating and cushioning the effects of a withdrawal of the UK from the EU without agreement (hard Brexit). In order to operationalise these laws, the CSSF implemented, via its eDesk portal, a notification system for authorised entities in the UK under CRD IV, MiFID II, PSD2 and the EMD7 thereby allowing them to benefit, under certain conditions, from a transitional regime for the provision of their services in Luxembourg for a period of 12 months following a hard Brexit.

In this context, the CSSF took a total of 345 individual decisions granting the transitional regime to entities authorised in the UK under CRD IV, MiFID II, PSD2 and the EMD. The CSSF also answered around 130 questions raised by stakeholders via email at brexit@cssf.lu.

However, following the adoption of the withdrawal agreement between the European partners and the UK, the transitional Luxembourg regime under the Brexit Laws no longer needs to be applied and the individual decisions of the CSSF granting this regime became obsolete. In accordance with the European agreement, European law will continue to apply until 31 December 2020 to UK entities that will thus be able to provide their services in the EU until that date provided they have the European passport.

⁵ Internet link: "EBA advises the European Commission on the implementation of the final Basel III framework".

⁶ Internet link: "EBA updates the estimates of the impact of the implementation of Basel III and provides an assessment of its effect on the EU economy".

⁷ Directive 2009/110/EC of 16 September 2009 on the taking up, pursuit of and prudential supervision of the business of electronic money institutions.

1.2.3. Operationalisation of the national third-country MiFIR regime which gives access to third-country players to provide services in Luxembourg

Regulation (EU) No 600/2014 (MiFIR) proposes different regimes allowing third-country firms duly authorised in their home jurisdiction to provide investment services and ancillary investment services in the European market. In Luxembourg, the legal basis for these regimes is laid down in Article 32-1 of the Law of 5 April 1993 on the financial sector. In 2019, the CSSF, by way of Circular CSSF 19/716, clarified its expectations in relation to these different regimes and in particular operationalised the national regime, which offers the possibility to third-country firms to provide, under certain conditions, investment services from the third country to Luxembourg on a cross-border basis without having an establishment in Luxembourg.

In order to benefit from one of the regimes which fall under the competence of the CSSF, the third-country firms concerned must submit a file to the CSSF in order to comply with Article 32-1. The CSSF processed around 50 such files in 2019.

1.2.4. Transposition of CRD V and contribution to the drawing-up of level 2 texts under CRD V and CRR2

Directive (EU) 2019/878 of 20 May 2019 (CRD V) amending Directive 2013/36/EU (CRD IV) and Regulation (EU) No 2019/876 of 20 May 2019 (CRR2) amending Regulation (EU) No 575/2013 (CRR) are part of a package of banking reforms proposed by the European Commission since November 2016 with the aim of completing the European post-crisis regulatory reforms. The purpose of these banking reforms is to reduce the risks in the financial sector and to implement the outstanding elements in order to make the financial system more resilient and stable in the context of the completion of the banking union and the capital markets union.

Member States must transpose CRD V by 28 December 2020 at the latest. CRR2 will be applicable as from 28 June 2021, save for certain provisions.

Leverage ratio and long-term liquidity ratio requirements (NSFR - Net Stable Funding Ratio) are among the key measures of this new "banking package". Moreover, it clarifies Pillar 2 capital requirements and updates the macroprudential toolbox. The banking package integrates new risk measures, notably on counterparty credit risk, as well as reporting on the future regulatory framework regarding market risk (FRTB - Fundamental Review of the Trading Book). Finally, a principle of proportionality is introduced for less complex and smaller banks via a certain number of measures aiming to reduce the administrative burden related to reporting and disclosure requirements, as well as simplified market and liquidity risk rules.

The CSSF will support the Ministry of Finance throughout 2020 in the process of the transposition of CRD V into Luxembourg law and will adapt the regulatory texts, including Regulation CSSF No 15–02 relating to the supervisory review and evaluation process that applies to CRR institutions, with a view to complying with the new provisions of the banking package.

1.2.5. Drawing-up of the future single circular on outsourcing

The EBA Guidelines on outsourcing arrangements (EBA/GL/2019/02), which aim in particular at credit institutions, CRR investment firms, payment institutions and electronic money institutions, govern the new outsourcing arrangements established after 30 September 2019. The CSSF intends to take this opportunity to compile all the rules governing outsourcing in a single circular. This circular will thus specify all the arrangements in relation to internal governance and sound risk management to be implemented, by observing the principle of proportionality, by the supervised entities when outsourcing functions, notably critical or important functions, and will clarify the prudential expectations of the CSSF in this field. The single circular will be published together with a registry template for outsourcing arrangements to be filled in by all the entities addressed in the circular by 31 December 2021 at the latest. Supervised entities will have until 31 December 2021 to comply for outsourcing arrangements entered into before 30 September 2019.

2. Supervision of financial markets

2.1. European Securities and Markets Authority - ESMA

The CSSF participates actively in the work of the Investment Management Standing Committee and its sub-group Operational Working Group on Supervisory Convergence, which are composed of experts of the European Supervisory Authorities, assisted by ESMA agents. As soon as approved by the Board of Supervisors, the documents are published on ESMA's website⁸. As regards the work finalised in 2019 in the field of collective investment management, commonly referred to as fund management, the following publications are especially noteworthy.

On 4 and 12 December 2019, ESMA published its first annual reports on the penalties and measures imposed by the national competent authorities under the UCITS Directive in 2016 and 2017 (ref. ESMA34-45-651) and 2018 (ref. ESMA34-45-756).

On 3 May 2019, ESMA published its final report with its technical advice to the European Commission on integrating sustainability risks and factors for investment funds in the delegated acts relating to the UCITS Directive and the AIFMD (ref. ESMA34-45-688). In July 2018, ESMA received a mandate from the European Commission in order to deliver a technical advice concerning the amendment of level 2 texts. This technical advice, which was subject to public consultations (ref. ESMA34-45-569), proposes amendments to Directive 2020/43/EU and to Delegated Regulation (EU) No 231/2013 in order to integrate sustainability risks and factors in the provisions governing organisational requirements, resources, senior management responsibility, due diligence requirements, conflicts of interest and risk management. Furthermore, on 23 May 2019, the Coordination Network on Sustainability (CNS) was created to foster the coordination of national competent authorities' work on sustainability. The CNS is responsible for the development of policies in this area with a strategic view on issues related to integrating sustainability considerations into financial regulation.

In July 2019, ESMA launched a consultation on its draft guidelines on performance fees under the UCITS Directive (ref. ESMA34-39-881). These guidelines aim at harmonising the payment of performance fees within the EU and establishing common standards of transparency in this respect.

On 19 July 2019, ESMA published two sets of guidelines regarding stress testing for money market funds (MMFs)(ref. ESMA34-49-164) and MMF reporting to national competent authorities (ref. ESMA34-49-168), in order to ensure consistent application of Regulation (EU) 2017/1131 on money market funds. The guidelines on stress testing establish common reference parameters for stress test scenarios that MMFs or managers of MMFs should include in their stress simulations. The guidelines will be updated once a year and will take into account the latest market developments. The guidelines and technical instructions published by ESMA on reporting provide specifications on how to fill in the MMF reporting template that managers of MMFs must transmit to the national competent authorities.

On 2 September 2019, ESMA published the final report on the guidelines on liquidity stress testing in UCITS and AIFs (ref. ESMA34-39-882). These guidelines are applicable as of 30 September 2020. Moreover, in autumn 2019, ESMA started to work on the ESRB recommendation relating to the design, calibration and implementation of macroprudential leverage limits under Article 25 of the AIFMD.

Furthermore, on 5 September 2019, ESMA published the framework applicable to stress simulation in the investment fund sector (ref. ESMA50-164-2458). ESMA presents the applicable methodology and a case study. The methodology can be used by European regulators to simulate stress for different segments of the investment fund industry and will also be used by ESMA as part of its regular risk monitoring. Moreover, ESMA's report for 2019 on trends, risks and vulnerabilities was published on 10 September 2019 (ref. ESMA50-165-883). It underlines a deteriorating outlook for the asset management industry and a market risk which is still very high. The report includes a study on the use of derivatives by UCITS equity funds, a study on the exposure of the investment fund

industry to collateralised loan obligations (CLOs) and a study on the impact of costs on the performance of active equity funds.

On 16 October 2019, the Joint Committee of the European Supervisory Authorities (EBA, ESMA and EIOPA) launched a consultation paper concerning amendments to the existing requirements pursuant to the PRIIPS Regulation⁹ (ref. JS-2019-63). The aims of the review are (i) to address the issues identified by stakeholders and the national competent authorities since the implementation of the KIID (Key Investor Information Document) in 2018 and (ii) to make specific changes to allow the application of the rules to investment funds that must prepare a KIID from 1 January 2022 onwards. The consultation paper proposes changes relating to the following topic areas: (i) illustrations of performance scenarios, (ii) information on investment-related costs, (iii) specific issues for different types of investment funds, (iv) specific issues for multi-option products. As part of this review, the European Commission, in cooperation with the European Supervisory Authorities, has undertaken a consumer testing exercise to assess the effectiveness of different presentations of performance scenarios. Results are expected in the first quarter of 2020.

On 10 December 2019, ESMA published its final report on draft regulatory technical standards under Article 25 of Regulation (EU) 2015/760 on European long-term investment funds (ELTIF) that aim to specify common definitions, calculation methodologies and presentation formats of costs referred to in paragraph 1 and the overall ratio referred to in paragraph 2 of that article (ref. ESMA34-46-91).

During 2019, ESMA also published several updates of its Q&As on the application of the UCITS Directive (ref.: ESMA34-43-392) and on the application of the AIFMD (ref.: ESMA34-32-352).

As regards regulatory reporting, one of the major challenges remains the use of supervisory data retrieved from reporting. As the use of data depends on the quality of the data received. The CSSF, jointly with ESMA and other European Authorities, developed and implemented additional monitoring rules in order to improve the comprehensiveness and the quality of data, notably AIFM reporting. It should be noted that the future MMF reporting should also benefit from a similar approach.

3. Cooperation within other European bodies

3.1. European Insurance and Occupational Pensions Authority (EIOPA)

EIOPA, composed of the representatives of the EEA insurance and occupational pensions authorities, assists the European Commission in the preparation of technical measures relating to EU legislation on insurance and occupational pensions and ensures the harmonised and continuous application of the European legislation in the Member States. One of EIOPA's key missions is the protection of the policyholders as well as of the members and beneficiaries of occupational pension schemes.

In 2019, Luxembourg participated, via the CSSF and the Commissariat aux Assurances, in the stress test exercise coordinated by EIOPA, as a follow-up on the stress tests of 2015 and 2017. The CSSF participated through a sample of defined benefit pension schemes subject to the Law of 13 July 2005 on institutions for occupational retirement provision (IORP) in the form of pension savings companies with variable capital (SEPCAV) and pension savings associations (ASSEP). This sample represented 73% of the total gross assets of the defined benefit pension schemes of the supervised IORPs. The other schemes that took part in the stress test were defined contribution schemes of IORPs subject to the supervision of the Commissariat aux Assurances.

The adverse stress test scenario of 2019 was mostly characterised by a significant fall in stock markets and a rise in risk-free rates and credit spreads. These shocks were defined in close cooperation with the ESRB. As for the 2015 stress test exercise, the effect under the adverse scenario on the real economy and on the financial sector has also been analysed via a questionnaire covering possible changes to asset allocation decided by IORPs. For the first time in the history of EIOPA's stress tests

for IORPs, an analysis of the consideration of ESG (environmental, social and governance) criteria in investment decisions was made, via a questionnaire as well. Directive (EU) 2016/2341 of 14 December 2016 on the activities and supervision of IORPs lays down that ESG criteria should be detailed in the investment policies and the 2019 stress test allowed an upstream assessment of the implementation of this directive.

In December 2019, EIOPA communicated the results of this exercise, noting that IORPs that participated in the 2019 stress test notably needed financial support from the sponsoring undertaking, upon the occurrence of such a stress scenario, in order to maintain sufficient assets to cover the technical provisions of the defined benefit pension schemes.

3.2. Committee of European Auditing Oversight Bodies (CEAOB)

Established by Regulation (EU) No 537/2014, the CEAOB is the body for cooperation between the different public audit oversight authorities in the EU. Among its members are the representatives of the European national authorities, including the CSSF, 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 objective of the CEAOB's work is to consistently support audit quality and, consequently, to keep and increase confidence of investors and the broader public in financial reporting in the EU. The supervision of auditors on a national level and the audit firms' operations on an EU and global level need to be addressed by providing a practical, consistent and comprehensive platform for cooperation of audit regulators under the CEAOB framework. To this end, the CEAOB's 2020 work programme has been designed to reflect the following four pillars: cooperation, communication, interconnectivity and monitoring¹⁰.

Chapter III

Macroprudential supervision of the financial sector

Real estate risk and cyclical risk were at the centre of macroprudential policy in Luxembourg in 2019.

In 2019, the CSSF received and processed the first two sets of reporting data on borrower-based indicators in residential real estate lending further to Circular CSSF 18/703. This reporting collects data related to the financial situation of borrowers in residential real estate in response to recommendation ESRB/2016/14 of the European Systemic Risk Board (ESRB) on closing real estate data gaps. The data collected offer the CSSF the possibility to analyse the lending practices of the Luxembourg banks in the real estate market.

This new reporting comes in a context where real house prices continued to rise rapidly and loans expanded so that household debt grew to a new peak, at 174% of 2018 income. In response to these developments, Luxembourg received a recommendation in September 2019 from the ESRB (ESRB/2019/06) to implement policy measures in order to keep risks in real estate markets in check.

According to the data submitted to the CSSF, the total volume of new loans granted by Luxembourg banks amounted to EUR 3.1 billion in the second semester of 2019, with 52% of new loans being granted at a variable rate. For these loans, the average loan-to-value ratio (LTV ratio)¹ was equal to about 75%, which means that on average, households borrowed three-quarters of the total acquisition price of their new property. In terms of distribution,

the LTV ratio for about one third of the new loans was larger than 90%. Data also reveal that the debt service in comparison to borrowers' income (DSTI ratio) is larger than 50% for about a fifth of the new loans, while it averages 38% for the new contracts. When it comes to maturities, loan maturity was about 21 years on average and larger than 25 years for 43% of the new loans.

On the regulatory side, a law on borrower-based measures came into force on 4 December 2019. The objective of the law is to equip the CSSF with macroprudential tools to manage financial stability vulnerabilities in the real estate sector. The law allows for activation of loan-to-value, loan-to-income, debt-to-income, debt service-to-income and maturity limits for mortgage credits. The ranges of limits allowed in the law are 75% to 100% for LTV, 400% to 1,200% for loan-to-income and debt-to-income, 35% to 75% for DSTI, and 20 to 35 years for maturity. The CSSF can only impose limits following a relevant recommendation by the Luxembourg Systemic Risk Committee (Comité du Risque Systémique, CdRS) and under the conditions

- the activation of these measures makes it possible to counter dysfunctions of the national financial system and/or to reduce the accumulation of risks for national financial stability arising from developments in the real estate sector in Luxembourg; and
- there are no other measures that would allow to address these risks adequately.

The LTV ratio measures the relationship between the borrowed loan amount and the value of the purchased property at the origination of the loan.

The CSSF will also continue efforts to improve data availability on commercial real estate activities. This is part of the policies resulting from the ESRB recommendation on closing real estate data gaps (ESRB/2016/14) which requires authorities to dispose of reliable information to monitor both the residential but also the commercial real estate sector. Similar to the efforts concerning residential real estate, the aim would be to introduce a reporting that would be able to assess exposures of the financial sector toward commercial real estate.

Finally, the CSSF also developed several tools to monitor cyclical vulnerabilities in Luxembourg. In 2019, the analysis of Luxembourg macroeconomic aggregates indicated persisting cyclical risks. Domestic credit continued rising rapidly despite lower growth prospects in the near term. As a consequence, multiple indicators of cyclical risk, like the credit-to-GDP gap and specific composite indicators, pointed towards an increase in systemic risk in Luxembourg and a need for authorities to act. In reaction to these developments in credit aggregates and rising cyclical vulnerabilities, the CSSF, after consulting with the CdRS and the BCL, and following a recommendation by the CdRS, increased the countercyclical capital buffer rate from 0.25% to 0.50%. The new rate is effective starting in the first quarter of 2021.

Chapter IV The international dimension of the CSSF's mission

Basel Committee on Banking Supervision

The CSSF participates in the work of the Basel Committee, the main sub-committees (Policy Development Group and Supervision and Implementation Group) and some working groups which are particularly relevant for the prudential banking supervision in Luxembourg, notably the Anti-Money Laundering Expert Group, the Large Exposures Group, the Working Group on Liquidity and the Task Force on Financial Technology which was created recently.

The year 2019 was a transitional year. With the revisions of the prudential treatment of market risk, the Basel Committee closed the major work streams relating to the necessary post-2008 financial crisis reforms at the beginning of the year. The Committee seized the opportunity to gather the full set of applicable rules in a single and easy-to-access framework which is available online since 9 April 2019 at https://www.bis.org/basel_framework/index.htm.

The finalisation of the regulatory work led the Basel Committee to reassess its strategic priorities and to revise its work programme. In 2019, the Committee thus redeployed its resources to evaluate the impact and effectiveness of the new Basel III framework, including possible regulatory arbitrages. These analyses include monitoring the implementation of Committee rules in Member States in terms of substance and deadlines. The Basel Committee therefore continued its monitoring and assessment programme for the implementation of the agreed reforms (RCAP programme). In 2019, the peer reviews mainly focused on liquidity rules (NSFR) and large exposure rules.

Having finalised the regulatory aspects, the Basel Committee also shifted its focus on monitoring banking risk which drove the creation of the Committee in 1974. Among the prominent risks, the Committee was particularly interested in climate change-related banking risks, as well as in technological risks, whose rapid evolution challenges the resilience of banking operations. In this context, the Committee expressed its position on crypto-assets twice, namely through the Newsletter of 13 March 2019 and the discussion paper "Designing a prudential treatment for crypto-assets" published in December 2019.

Furthermore, the Basel Committee launched a consultation in November 2019 on the revision of its approach regarding anti-money laundering and combating the financing of terrorism (AML/CFT). The proposed changes aim at strengthening the interaction and cooperation between prudential and AML/CFT authorities.

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

2.1. 44th Annual Conference of the International Organization of Securities Commissions (IOSCO)

The securities and futures markets regulators, including the CSSF, and other members of the international financial community met in Sydney from 13 to 15 May 2019, on the occasion of the 44th Annual Conference of

IOSCO. The participating members discussed the next measures to implement the IOSCO work plan for 2019. The aspects discussed include the sale of crypto-assets to consumers, the digitalisation of the financial sector and consumer protection, data protection, sustainable finance, asset management and the use of new financial technologies¹.

2.2. Work of the IOSCO Committees

On 13 December 2019, IOSCO issued its final report on recommendations for a framework assessing leverage in investment funds², based on the final recommendations of the Financial Stability Board published on 12 January 2017. This report was prepared by Committee 5 on Investment Management in which the CSSF participates. The recommendations create a framework designed to facilitate monitoring of leverage in investment funds which, under certain circumstances, could pose a risk to financial stability. This follows the publication in 2018 of the recommendations and good practices as regards liquidity management for investment funds.

Moreover, IOSCO is finalising the "5th Hedge Fund Survey" with the industry of the participating Member States (including Luxembourg) on data as at 30 September 2018 and continued working on investor-related issues and arbitrage and trading issues relating to ETFs (Exchange Traded Funds). Finally, Committee 5, with the active participation of the CSSF, started analysing the implications of artificial intelligence and machine learning for fund management.

The CSSF also participates in the work of the IOSCO Assessment Committee and its Implementation Task Force Sub-Committee. The Assessment Committee is responsible, among other things, for maintaining the IOSCO Principles and Methodology, which involves supporting the users of the methodology, updating the methodology and assessing the need to update the IOSCO Principles.

The CSSF is also a member of the IOSCO European Regional Committee, which is one of the four regional committees set up by IOSCO in order to allow the national competent authorities to exchange views on issues relating to securities regulation.

Finally, IOSCO published the "Statement on Disclosure of ESG matters by Issuers" drawn up by its Committee 1 on Issuer Accounting, Audit and Disclosure in 2019. This document encourages issuers to consider the materiality of non-financial (environmental, social and governance (ESG)) matters for their business and to assess the risks and opportunities with regard to their strategy and risk management. When ESG matters are considered to be material for investor decisions, issuers should disclose their impact on the financial performance and value creation.

3. International Monetary Fund

In 2019, the International Monetary Fund (IMF) assessed the economic and financial developments in Luxembourg and examined the related economic and financial policies. This mission is undertaken as part of the annual consultations under Article IV of the IMF's Articles of Agreement. During this Article IV consultation, the staff team collected economic and financial information, and discussed with officials the country's economic developments and policies. In depth discussions were conducted with the CSSF, the government and central bank officials.

On 8 May 2019, the Executive Board of the IMF concluded the Article IV consultation with Luxembourg and the publication of the report followed on 10 May 2019. The IMF stressed that the growth outlook remains favourable in Luxembourg, but risks are tilted to the downside. Sound economic and fiscal policies together with favourable global conditions in recent years translated into solid growth and a decline in unemployment to record post-crisis lows. While growth prospects remain favourable, risks are to the downside, such as a weaker-than-expected global growth, a disorderly Brexit, changes in international tax rules, and a sharp tightening of global financial conditions. Regarding the domestic real estate sector, rising housing prices may trigger affordability challenges and could exacerbate the already high household indebtedness.

¹ https://www.iosco.org/news/pdf/IOSCONEWS531.pdf.

^{2 &}quot;Recommendations for a Framework Assessing Leverage in Investment Fund" (ref. FR18/2019);

cf. https://www.iosco.org/news/pdf/IOSCONEWS552.pdf.

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The IMF encourages the national authorities to (i) build on the strong fiscal record and preserve buffers, (ii) continue to implement the new international tax standards, while exploring options to mitigate revenue risks from changes in international taxation, (iii) further enhance regulation and supervision of the financial sector in line with the recommendations of the 2017 Financial Stability Assessment Program (FSAP), (iv) address structural challenges in the pension system and housing supply and (v) improve public investment efficiency.

Another Article IV consultation started in November 2019 with an IMF staff visit. The findings of the mission will be published in 2020.

Chapter V

Financial innovation



The financial technologies (commonly called FinTech) play an important role in the CSSF's work. Given their often transversal nature, the different aspects of financial technologies can hardly be dissociated from the CSSF's specific supervisory areas. Some salient elements relating to 2019 are presented hereafter, as well as the challenges for 2020.

The CSSF seeks an active dialogue with the market.

The CSSF continues to place particular emphasis on promoting an active dialogue and has thus increased the number of meetings with existing and new market players in the FinTech industry. The objectives of this interaction, encouraged by the CSSF, aim at:

- gaining a better insight of the industry's expectations;
- closely and openly monitoring the market and its developments;
- allowing FinTech players, notably those with innovative projects and/or start-ups, to integrate, at an early stage, the regulatory requirements in their projects;
- providing market players seeking authorisation, in particular new market entrants that are not familiar with the financial sector's regulatory framework, with explanations on the provisions to comply with in order to obtain the ministerial authorisation applicable to their business model;
- achieving a better preparedness for the CSSF to address future challenges;

 taking into account technological developments and new innovative projects in the regulatory discussions.

The contacts with existing players and new market entrants in the FinTech area often led the CSSF to perform an in-depth analysis of the various sophisticated aspects of the innovative projects that are submitted, in order to identify the possibility to integrate, at an early stage, the regulatory considerations into these projects.

In addition to these exchanges with specific market players, the CSSF also proactively interacted with bodies promoting FinTech in Luxembourg, be it innovation hubs housed by financial sector entities or bodies such as the LHoFT or Luxembourg for Finance, to have a comprehensive view of the financial centre's development with regard to FinTech.

The numerous questions submitted in 2019 to the CSSF's innovation hub or during the presentations of innovative projects notably concerned the provision of payment services under PSD2 and projects aiming at facilitating the verification of the identity of the payment service providers' customers.

In addition, in certain periods of 2019, a high number of requests concerning the establishment conditions for entities providing or intending to provide services related to virtual assets have been received, in particular regarding the exchange of cryptocurrencies. These projects were, however, at a very early stage of development and only a small number of them resulted in a detailed presentation of a concrete project to the CSSF. As regards projects on the potential issuance of security

tokens, the prior scrutiny of these projects by the CSSF often led to the conclusion that the legal requirements to qualify the security tokens as financial instruments were not met or that the structuring of these virtual assets was not sufficiently precise to allow a concrete categorisation. The CSSF continues to draw particular attention to these structurings, as they constitute the basis for determining the rights available to the potential investors in such virtual assets.

While awaiting more detailed regulation on virtual assets, such as the above-mentioned security tokens which did not fulfil the criteria needed to qualify as financial instruments, the CSSF also enquired about the AML/CFT arrangements put in place by the concerned players on the financial flows involved in these projects.

Regulating virtual asset service providers.

The development of new technologies, notably distributed ledgers or also cryptography, implied that supervisory authorities worldwide have been increasingly confronted with business projects related to various types of virtual assets, such as virtual currencies, cryptocurrencies or tokens (e.g. payment, investment or utility tokens). Based on the expertise gained over the last years, and taking into account the numerous requests from market players expressing their wish to the CSSF to benefit from a serious regulatory framework for their activities related to virtual assets as well as the cross-border dimension of these technological projects, the CSSF committed first in favour of a European, or even international, regulatory solution. In parallel, and as already mentioned above for security token projects, the CSSF continued raising its discussion partners' awareness on the importance of putting in place AML/CFT arrangements.

In January 2020, this same awareness objective led the CSSF to request all virtual asset service providers (VASPs) to start preparations for compliance with the June 2019 FATF recommendations on virtual assets titled "Guidance for a risk-based approach to virtual assets and virtual asset service providers", and with the two draft laws amending the Law of 12 November 2004 on the fight against money laundering and terrorist financing

(AML/CFT Law) which extend the law's scope of application to VASPs and provide for the CSSF to become the AML/CFT supervisory authority for VASPs.

The entry into force of the two laws dated 25 March 2020 amending the AML/CFT Law represented the first step of the integration of VASPs into the Luxembourg financial regulatory framework, thereby allowing mitigating the risks associated with virtual asset financial activities whilst increasing the professional credibility of the different players. Pending the implementation of an additional and more detailed national or European framework, these amendments are a first response to the multiple actual needs expressed by market players already active in the area of virtual assets, whether service providers or consumers, towards the CSSF in 2019.

Virtual assets are defined by the AML/CFT Law as a digital representation of a value, including a virtual currency, that can be digitally traded, or transferred, and be used for payment or investment purposes, except for virtual assets that fulfil the conditions of electronic money within the meaning of the Law of 10 November 2009 on payment services and virtual assets that fulfil the conditions of financial instruments within the meaning of the Law of 5 April 1993 on the financial sector.

The implementation of these regulatory amendments represents a major challenge for the CSSF in 2020. At the beginning of April 2020, the CSSF therefore requested already active VASPs to comply with the professional obligations and conditions provided for by the law, to notify the activity to the CSSF and to submit a registration file to the CSSF in order to be specifically registered as VASP by the CSSF. At the same time, the CSSF reminded future service providers that no VASP may be established in Luxembourg without such registration and that this registration is not automatic but subject to compliance with the requirements set out in the AML/CFT Law. The CSSF's role for VASPs is limited to registration, supervision and enforcement for AML/CFT purposes. The fact that a VASP is included in the register shall thus not be interpreted in any way whatsoever as a positive assessment by the CSSF of the quality of the services provided.

The CSSF seeks European and international collaboration and cooperation.

At European and international level, the CSSF continued studying, openly and proactively, the developments in FinTech matters, either as a member of multiple working groups¹ whose purpose is to establish common responses and approaches to FinTech issues, or as an active participant in major international events, such as the FinTech Festival in Singapore. The CSSF also cooperated with its European and international peers in drafting EU and international standards for the regulatory framework applicable to FinTech players. This international presence also allowed reinforcing Luxembourg's position in the FinTech sector.

In 2019, the CSSF extended its participation to new EU and international working groups. It has become a member of the European Forum for Innovation Facilitators (EFIF) whose objective consists, in particular, in promoting coordination and cooperation between national innovation facilitators in order to ensure the development of innovation in the European financial sector and seeking common responses to issues linked to new technologies.

· The CSSF joined the GFIN.

With the purpose of exchanging on experiences and regulatory solutions at international level, the CSSF joined the Global Financial Innovation Network (GFIN), a network of over 50 international organisations. The objective of the GFIN is to create a new framework for cooperation between financial sector regulators, allowing sharing experiences and approaches on financial innovation topics.

The CSSF implemented a cooperation agreement.

In 2019, the CSSF signed a cooperation agreement with the Dubai Financial Services Authority to create a framework to exchange information on FinTech market developments and trends and on regulatory issues linked to the use of new technologies for the provision

of financial services. This agreement also provides for a referral mechanism for entities wishing to operate in both jurisdictions.

¹ As for example the SIG Task Force on Financial Technology of the Basel Committee on Banking Supervision, the IOSCO FinTech Network, the FinTech Expert Group of the ECB and different EBA and ESMA working groups on financial innovation

Chapter VI

Supervision of banks



1. Banking supervision practice

1.1. Organisation of the supervision

For banks, the responsibility for direct prudential supervision in the strict sense is organised as follows.

Banks established in Luxembourg by category

Type of credit institution	Competent authority	Number
Significant institutions incorporated under Luxembourg law	ECB	31
Less significant institutions incorporated under Luxembourg law	CSSF	56
Branches of a significant institution	ECB	20
Branches of a less significant institution	Supervisory authority of the head office	7
Branches of a non-EU institution	CSSF	13
Total		127

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 the integrity of the markets: European Market Infrastructure Regulation (EMIR), Securities Financing Transactions Regulation (SFTR) and Benchmark Regulation (BMR);
- 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.

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.

Number of agents in charge of the off-site supervision of the different areas of supervision

Area of supervision	Full-time equivalents
Prudential supervision of significant institutions	17.80
Prudential supervision of less significant institutions	25.55
Supervision of compliance with the AML/CFT professional obligations	7.00
Depositary bank function	3.75
Recovery plans	2.80
Consumer/investor protection	2.00
EMIR/SFTR	1.00
Payment services	1.00
Legal and authorisations	8.25
Methodology and reporting	8.25
Risk analysis/stress testing	6.00
Internal model supervision/Market risk/ Interest rate risk/Liquidity risk	9.00
IT and statistics	1.50
SSM liaison	1.00
Secretariat	2.55

As regards the institutions directly supervised by the ECB, the CSSF is member in 26 Joint Supervisory Teams (JSTs).

Agents in charge of authorisations and validation and supervision of internal models mostly carry out tasks under the aegis of the ECB.

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 its resources as efficiently as possible, the determination of the supervisory priorities is based on an approach taking into account the main risks and major vulnerabilities of the Luxembourg banking centre (risk-based approach).

Together with the ECB and other national competent authorities of the participating countries, the CSSF participates in the Single Supervisory Mechanism (SSM) and, thus, takes into account the supervisory priorities defined by the ECB for the supervision of significant institutions. In 2019, the priorities of the ECB were mainly credit risk as well as different aspects of risk management.

However, as most of the banks in Luxembourg focus on wealth management activities and custody of financial assets, credit risk in general and non-performing loans in particular are not considered as the main risk of the Luxembourg financial centre as a whole.

Therefore, priorities for the prudential supervision of the CSSF in 2019 were the following.

1.2.1. Conduct risk, including money laundering and terrorist financing

Money laundering and terrorist financing (ML/TF) are risks inherent to the activities of international financial centres such as Luxembourg, whereas private wealth management involving international customers is particularly exposed. Within the CSSF, the control of these risks has undergone significant developments during the last years with a substantial increase in the number of staff and systems which allows an efficient fight against ML/TF. These developments continued in 2019, in a context of prevention (via targeted communications) as well as sanctioning. Similarly to the previous years, in 2019, the AML/CFT on-site inspections² resulted in the CSSF imposing administrative fines³ on banks which did not comply with the AML/CFT professional obligations.

1.2.2. Profitability risk

Profitability remains challenging for many banks in Luxembourg. Based on the observations of the CSSF, this risk is mainly linked to the following factors: (i) a business volume lower than the critical mass, (ii) pressure on margins and prices, (iii) rise in operational costs due to the increase and

² For further details on this subject, please refer to point 1.1. of Chapter XIX "Financial crime".

³ For further details on this subject, please refer to point 2. of Chapter XVI "Instruments of supervision".

complexity of regulations and (iv) investments in digitalisation projects.

The profitability risk is greater in small banks which often do not have the critical mass to cover their costs. Small banks have a cost-income ratio which is on average higher than that of bigger banks. In the future, it is probable that the number of credit institutions will continue to decrease and that the non-profitable banks will leave the market. However, as the means of action of the supervisor with respect to the profitability risk are limited, the CSSF mainly ensures that this risk does not jeopardise deposits.

1.2.3. Operational risk

The main activity of banks active in wealth 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 risks and the other risks mentioned above, IT risk, business continuity risk and risks related to the use of sub-depositaries.

1.3. Supervision of significant institutions

At the end of 2019, 51 banks established in Luxembourg were directly supervised by the ECB, either because they fulfil the criteria to qualify as significant institution (SIs) at solo or consolidated level, or because they were part of a group considered as significant. These banks represented 70.5% of total assets of the Luxembourg banks.

Supervision of SIs is exercised by Joint Supervisory Teams (JSTs) formed of staff members from the ECB and from the national competent authorities. At the end of 2019, the CSSF was a member of 26 JSTs. A total of 35 CSSF agents were involved in this supervision, i.e. 21 supervisors and 14 experts.

SIs established in Luxembourg by category

SSM status	Number of banks	In % of assets
Significant banks, group head in Luxembourg	5	18.6%
Significant banks, subsidiaries of an SI	26	32.1%
Branches of an SI	20	19.8%
Sub-total SIs	51	70.5%
Total	127	100.0%

The SSM's supervisory approach is described in detail in the document "Guide to banking supervision"⁴.

1.4. Supervisory review and evaluation process (SREP)

The ECB and the competent authorities have been joining forces since 2015 to establish a common SREP methodology for less significant institutions (LSIs) based on the EBA Guidelines on SREP (EBA/GL/2018/03) and on the methodology applicable to SIs as well as the SREP methodologies in place at national level. Since 2018, the resulting common standards⁵ have been applied by the CSSF to the high-priority LSIs⁶ and, as from 2020, to all LSIs.

The SREP is carried out based on a wide range of quantitative and qualitative information sources. It 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.

- 4 https://www.bankingsupervision.europa.eu/ecb/ pub/pdf/ssmguidebankingsupervision201411. en.pdf?404fd6cb61dbde0095c8722d5aff29cd. In this regard, see also the annual reports of the ECB published under https://www.ecb.europa.eu/pub/annual/html/index.en.html.
- 5 https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.srep_methodology_booklet_lsi_2019~15ce18ff7f.en.pdf?2e33cff1oa3115ea7ce685de4a309402.
- 6 All the LSIs that the ECB considers of particular significance due notably to their size.

At least once a year, the analyses, information and insights of the on-site and off-site supervision are gathered and completed, where necessary, by specific analyses in order to reach an overall assessment reflected in an overall SREP score ranging from 1 (low risk for the viability of the institution) to 4 (high risk for the viability of the institution).

SREP scores

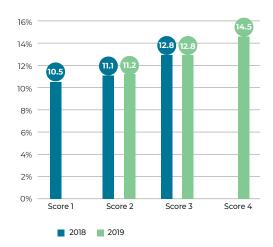


It can be noted that between SREP 2018 and SREP 2019, the overall SREP scores remained quite stable.

Based on the outcome of the SREP, the CSSF decided to require additional own funds for LSIs for which it deemed that the minimum capital requirements according to the CRR did not appropriately cover the risks incurred (Pillar 2 Requirement – P2R).

The CSSF also determined if the applicable capital requirements can be fulfilled under conditions of stress. Where the quantitative results of the relevant stress tests suggest that an institution may not be able to fulfil the applicable capital requirements under stress or where it is extremely sensitive to the assumed scenarios, the CSSF requires additional own funds in the form of Pillar 2 Guidance (P2G) to ensure that the institution is appropriately capitalised.

Own funds requirements (P1+P2R+buffers+P2G) by SREP score



On average, Pillar 1 capital requirements and P2R for all LSIs, including capital buffers and P2G, amounted to 11.85% against 11.70% in 2018.

Moreover, the CSSF took other supervisory measures to address specific risks and weaknesses, particularly with respect to liquidity risks and by requiring restrictions for certain economic activities or an additional reporting.

1.5. Authorisations

The CSSF mainly intervenes in three 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 laws and regulations. After the examination of the file, the CSSF drafts a proposal and submits it for decision to the ECB, in the case of Luxembourg credit institutions,

or to the Minister of Finance, in the case of branches of non-EU institutions.

In 2019, the CSSF worked on six authorisation requests for new credit institutions and branches of non-EU banks. Three authorisations were granted to credit institutions by the ECB in 2019. For three files, the examination has started in 2019 and continues in 2020.

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% 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 2019, the CSSF examined 22 qualifying holding files, nine of which led to an authorisation by the ECB during the year. Two files were withdrawn during the examination and one file was rejected by the ECB. The examination of the other files continues in 2020.

1.5.3. Authorisation of directors and managers of banks

In 2019, the CSSF dealt with 196 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, experience and professional availability, with legal and regulatory requirements. Particular attention is given to compliance with AML/CFT legislation. Following the examination of the files by the CSSF, the nominations in SIs are transferred to the ECB for authorisation, whereas the nominations in LSIs and third-country branches are directly authorised by the CSSF.

1.6. Depositary bank

The UCITS V Directive and the AIFMD, together with their delegated acts, reinforce the regulatory framework of the depositary activity. The depositary bank duties include

not only the safekeeping of the UCI assets, but also third parties' diligence and oversight, monitoring of UCITS cash flows as well as conflict of interest and independence management. The depositary bank needs to act independently and in the best interest of the investors.

As of 31 December 2019, 49 banks were acting as depositary banks of Luxembourg-domiciled UCIs and pension funds.

The CSSF's prudential supervision aims to verify that the depositaries subject to its supervision continuously observe all legal and regulatory provisions relating to their organisation and operations, with the objective to ensure investor protection and stability of the financial system. Prior to starting any depositary business activities for Luxembourg-domiciled UCIs, an administrative authorisation has 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), as well as any material outsourcing, are also subject to approval.

During 2019, nine administrative authorisations to act as UCI depositary and six applications for outsourcing of UCI depositary tasks were handled by the CSSF.

1.7. MiFID

One year after the entry into force of MiFID II, the banking market players are still facing a certain number of difficulties in order to comply with all the legal and regulatory obligations imposed by the directive. Thus, for example, the requirements regarding the information to be communicated to clients and, in particular, the reporting on the ex ante and ex post costs and charges or the new rules on product governance represented and still represent a real challenge.

The CSSF made further efforts and extended the scope of its interventions with the credit institutions in the framework of its on-site as well as off-site supervision always using a risk-based approach. In addition, several questionnaires were sent, mostly at the request of other European supervisors, as regards the

new third-country regime, the marketing, the distribution or the sale of contracts for difference or as regards the obligations to be observed with respect to the appropriateness assessment to be carried out vis-à-vis the clients.

It is therefore 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) has entered into force on 16 August 2012 and aims to improve the transparency of over-the-counter derivatives markets and to reduce the risks associated with these markets. Following the review of EMIR by the European Commission, Regulation (EU) 2019/834 of 20 May 2019 (EMIR Refit) entered into force on 17 June 2019 and introduced several changes aiming at eliminating disproportionate costs and burdens especially for smaller financial counterparties.

In the last years, the CSSF focussed on ensuring general compliance with EMIR requirements in force. For example, 55 observation letters were sent to banks established in Luxembourg highlighting identified deficiencies. In 2019, the attention shifted towards ensuring a correct, accurate and reliable reporting of data. The CSSF has therefore developed IT tools to analyse submitted reports in an automated manner. In addition, following a risk-based approach, on-site inspections are being performed in order to ensure compliance with regulatory requirements under EMIR.

1.9. Payment services

Directive (EU) 2015/2366 of 25 November 2015 on payment services in the internal market (PSD2), transposed into national law by the Law of 20 July 2018 amending the Law of 10 November 2009 on payment services imposes a range of obligations for banks which provide payment services. These banks submit to the CSSF three reports the arrangements of which were defined by EBA guidelines and implemented via CSSF circulars, namely:

- notification of major operational or security incidents (Circular CSSF 18/704 which refers to Guidelines EBA/GL/2017/10);
- reporting data on fraud (Circular CSSF 19/712 which refers to Guidelines EBA/GL/2018/05 and which applies as from January 2020); in 2019, the CSSF carried out an exercise to collect the data via a circular-letter and received data on fraud for 2018;
- a report on security measures for operational and security risks related to payment services (Circular CSSF 19/713 which refers to Guidelines EBA/GL/2017/17).

These reports allow meeting the objectives of PSD2 which aims to make payments more secure and protect consumers.

1.10. Recovery plans

Directive 2014/59/EU of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms (BRRD) provides the authorities with instruments which should allow them to deal with failing national or transnational banks and, thus, to limit their systemic impact. Among these arrangements implemented by the BRRD, transposed by the Law of 18 December 2015, is the obligation to establish a recovery plan indicating notably the measures planned by an institution to restore the viability following financial deterioration.

At national level, the CSSF received 37 recovery plans (including three group recovery plans from groups it supervises on a consolidated basis) of which it assessed the comprehensiveness, the quality and the general credibility. Among these plans, 24 are subject to simplified obligations for banks fulfilling certain criteria. Furthermore, the CSSF organised nine meetings during which the respective banks presented their recovery plan.

At international level, the CSSF participated, in its capacity as host authority, in eight joint decisions on group recovery plans involving LSIs. It also contributed to the assessment of recovery plans of SIs. Finally, it took part in three meetings of the Crisis Management Group organised by the home authorities of

systemic banking groups having a material subsidiary in Luxembourg. Furthermore, the CSSF actively participated in different working groups and drafting teams involved in the wider context of the BRRD and the crisis management framework at the EBA and SSM level.

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. Pursuant to the Law of 17 April 2018, the CSSF is the competent authority to ensure compliance with the BMR by the supervised entities governed by this regulation.

The BMR targets three types of market participants: benchmark administrators, contributors providing data for the calculation of a benchmark and the supervised entities using such a benchmark.

The division "Horizontal risk analysis" of the department "Banking supervision" is in charge of supervising the contributing banks and the LSIs using these benchmarks, whereas the benchmark administrators are supervised by the department "Supervision of securities markets" of the CSSF.

In 2019, the CSSF monitored the preparations of the LSIs for a smooth transition to alternative or reformed reference rates and published a press release in this respect⁷. As far as the single local bank acting as contributor is concerned, its compliance with the external audit requirements for contributors to benchmarks was verified. Furthermore, the CSSF participates in the Euribor college which consists of all national competent authorities of banks contributing to Euribor.

1.12. Review of the approaches used to calculate the risk exposure amounts

The internal ratings-based approaches used by banks to determine the risk exposure amounts in accordance with the CRD IV/CRR framework require prior authorisation by the competent authorities. In addition, these internal models are subject to regular reviews by the competent authorities as provided for in Articles 78 and 101 of CRD IV, transposed in Luxembourg through Articles 23 and 24 of CSSF Regulation No 15–02 relating to the supervisory review and evaluation process that applies to CRR institutions. In Luxembourg, internal models which mainly cover credit and operational risk are used, with a few exceptions, by SIs.

The reconsideration of the degree of undue variability of risk weights that these internal models may lead to as well as the harmonisation of the rules (via the EBA) and practices (within the SSM) led to the enhancement of the model reviews laid down in Articles 23 and 24 of CSSF Regulation No 15–02.

The CSSF supports the ECB in the implementation of prudential processes relating to the use of internal models by the SIs: network of experts in internal models, handling of authorisation files, planning and performance of on-site inspections or ongoing model monitoring (OMM), including relevant supervisory measures. In the context of its permanent supervision and regarding credit risk, the CSSF analysed, in 2019, the adequacy of the validation of internal models for Luxembourg SIs whose group head is in Luxembourg as well as the quality assurance and evaluation of the EBA benchmarking results for all Luxembourg banks using internal ratings-based approaches.

Still on the subject of credit risk, the ECB carried out three on-site inspections under the authority of a CSSF head of mission in 2019, two of them in the framework of the TRIM (Targeted Review of Internal Models) project the aim of which it was to restore confidence in and credibility of internal models approaches. With the entry into force of the SSM, these inspections are governed by common processes and procedures within the SSM.

⁷ https://www.cssf.lu/wp-content/uploads/files/Publications/Communiques/Communiques_2019/C_regulation_ EU_2016_1011_indices_used_as_benchmarks_241219.pdf.

1.13. International cooperation in banking supervision

Cooperation between European competent authorities by way of supervisory colleges did not become entirely unnecessary with the implementation of the SSM. These colleges continue to be in place for LSIs. This cooperation also extends to non-European authorities. In 2019, the CSSF organised three supervisory colleges concerning banks for which it exercised an ultimate consolidated supervision at European level.

As a large number of banking groups is present in the Luxembourg financial sector through subsidiaries, the CSSF participates, as host supervisor, in many 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 Chinese and US authorities is mainly done via the participation in supervisory colleges organised by these authorities.

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 make a Joint Decision on Capital and Liquidity which is formally communicated to the banking group and its subsidiaries. Moreover, the purpose of the colleges is to promote the exchange of information between authorities, including information on the situation of compliance risks related to ML/TF.

The "ESA joint guidelines on AML/CFT", which entered into force on 10 January 2020, provide for the establishment of supervisory colleges with respect to AML/CFT by the end of 2022. Following a preliminary analysis, the CSSF will organise 17 colleges as lead supervisor and participate in 27 other colleges as competent authority. This additional task will require an adaptation of the CSSF's resources and budget.

The CSSF 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 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 Article 9–1 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 it deems it necessary.

1.14. Central securities depositories

Regulation (EU) No 909/2014 of 23 July 2014 (Central Securities Depositories Regulation – CSDR) introduced the licence of central securities depository (CSD) in a harmonised manner at EU level.

In Luxembourg, one bank currently exercises an activity which requires the authorisations under the CSDR. In the case at hand, three authorisations are required:

- the authorisation to carry out CSD activities (Article 16 of the CSDR);
- the authorisation to set up an interoperable link (Article 19 of the CSDR);
- the authorisation to provide, under the banking licence, ancillary banking services for CSD participants (Article 54 of the CSDR).

With the extent and complexity of the CSDR and the relevant technical standards, drawn up by ESMA and the EBA, the CSSF identified around 1,500 requirements and concrete conditions to be verified and assessed during the handling of the authorisation files.

The process started with the simultaneous submission, in September 2017, of the three above-mentioned authorisation files. Throughout 2018 and 2019, the CSSF communicated its observations in relation to the authorisation files to the entity concerned. The full compliance of the entity with the CSDR is still in progress and the authorisation process continues in 2020.

1.15. Stress testing

In accordance with Article 25 of CSSF Regulation No 15-02, the CSSF applies, at least once a year, prudential stress tests to banks it supervises. These tests aim to identify potential sources of risks and vulnerabilities to which the banks may be confronted. The results are a source of information to (i) compare, judge and challenge the results of the stress tests carried out internally by banks in the framework of their ICAAP8, (ii) help assess the solvency risk of the institutions and (iii) help assess the situation and future capital requirements of an institution as a preventive approach. Moreover, the results of the stress tests form a starting point for determining the capital levels under Pillar 2 (Pillar 2 Guidance - P2G) for LSIs.

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 the SSM level, the CSSF assists the ECB in the annual stress test exercise, i.e. in developing a methodology and performing the stress test. In 2019, the ECB focussed on liquidity stress tests. The CSSF's assistance consisted of its technical expertise in relation to the five SIs having their group head in Luxembourg.
- 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 Luxembourg banking sector.

1.16. Intra-group credit risks

One of the main risks supervised 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 34% of assets of the Luxembourg banking sector at the end of 2019. As permitted by 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 with the legal conditions provided for in the above-mentioned Article 56-1.

1.17. The case of ABLV Bank Luxembourg S.A.

On 13 February 2018, the US Department of the Treasury's Financial Crimes Enforcement Network (FinCEN) published a "Notice of Proposed Rulemaking" (NPRM) outlining a significant risk of money laundering within ABLV Bank, AS and its Luxembourg subsidiary ABLV Bank Luxembourg S.A. (ABLV LUX), both subject to direct supervision of the ECB. The NPRM sparked a wave of withdrawals and requests for withdrawals of deposits and a limited ability to access liquidity.

Following discussions with the ECB, the CSSF filed, on 19 February 2018, an application with the registry (*greffe*) of the Luxembourg *Tribunal d'arrondissement* (District Court) for the opening of the suspension of payments proceedings against ABLV LUX based on Article 122 of the Law of 18 December 2015 on the failure of credit institutions and certain investment firms (BRRD Law).

On 23 February 2018, the ECB declared ABLV LUX failing or likely to fail in accordance with Article 18(1) of Regulation (EU)
No 806/2014. Informed of this decision, the Single Resolution Board (SRB) decided, on the same day, not to adopt any resolution action concerning ABLV LUX, especially in view of the absence of public interest for such actions. Following this decision of the SRB, the Resolution Board of the CSSF (CODERES)

considered, on 26 February 2018, that there was no need to take any resolution action, decided in favour of the dissolution and winding-up of ABLV LUX and approved the application for the dissolution and winding-up of ABLV LUX.

On 27 February 2018, the CSSF, represented by its Executive Board and, where necessary, by the CODERES, filed an application with the registry of the Luxembourg *Tribunal d'arrondissement* with the aim, primarily, to open judicial winding-up proceedings of ABLV LUX (following the decision of the CODERES) based on Article 129 of the BRRD Law and, secondarily, to open the suspension of payments proceedings against ABLV LUX within the meaning of Article 122 of the BRRD Law, reiterating the first application of the CSSF dated 19 February 2018.

On 9 March 2018, the Luxembourg *Tribunal d'arrondissement* approved the second request but rejected the request for judicial winding-up and thus authorised the suspension of payments of ABLV LUX for a period of six months. The Court also appointed Me Alain Rukavina and Deloitte Tax & Consulting S.à r.l., represented by Mr Eric Collard, as administrators and assigned them the task to control the management of the assets of ABLV LUX. The Court, through a series of judgements, then extended the duration of the suspension of payments of ABLV LUX until 4 July 2019 to allow for a possible takeover of ABLV LUX.

Since 30 April 2019, ABLV LUX has not been qualified as significant institution (SI) and has therefore not been subject to direct supervision of the ECB in the framework of the SSM. Since this date and until the decision taken by the ECB to withdraw the banking licence of ABLV LUX, the CSSF has been the competent authority for ABLV LUX.

Following the failure of the measures for a takeover of ABLV LUX by a new shareholder, the CSSF, represented by its Executive Board, filed, on 24 June 2019, an application with the registry of the Luxembourg *Tribunal d'arrondissement* for the opening of judicial winding-up proceedings of ABLV LUX based on point (1) of Article 129(1) of the BRRD Law.

On 2 July 2019, the Luxembourg *Tribunal d'arrondissement* pronounced the dissolution and ordered the liquidation of ABLV LUX on the grounds that the previously decided suspension of payments has not permitted to redress the situation which justified the suspension. At the same time, the Court decided to appoint Me Alain Rukavina and Deloitte Tax & Consulting S.à r.l., represented by Mr Eric Collard, as liquidators of ABLV LUX.

On 6 September 2019, the ECB, in its capacity as competent authority to decide on the withdrawal of a banking licence in accordance with Article 4(1)(a) together with Article 14(5) of Regulation (EU) No 1024/2013 entrusting the ECB with specific tasks related to policies with respect to prudential supervision of credit institutions, took the decision to withdraw the banking licence of ABLV LUX pursuant to Article 18(e) of Directive 2013/36/EU transposed into Luxembourg law via Article 132(1) of the BRRD Law.

2. Developments in the banking sector in 2019

2.1. Development in the number of credit institutions

With 127 entities authorised at the end of the financial year 2019, the number of banks dropped by eight entities compared to 31 December 2018 where 135 entities were in operation.

Five banks started their activities in 2019.

Denomination	Start date of the activity	Type of activities
RBS International Depositary Services S.A.	19 February 2019	Depositary bank for UCIs
Northern Trust Global Services SE	1 March 2019	Depositary bank for UCIs
HSBC France, Luxembourg Branch	1 March 2019	Depositary bank for UCIs
Banking Circle S.A.	29 October 2019	Payment activity
Barclays Bank Ireland plc, Luxembourg branch	21 November 2019	Transaction banking

Thirteen banks were deregistered from the official list during 2019.

Denomination	Date of deregistration	Reason
Banque Carnegie Luxembourg S.A.	25 January 2019	Merger with Union Bancaire Privée (Luxembourg) S.A.
Hauck & Aufhäuser Fund Platforms S.A.	7 February 2019	Transfer of activities to Hauck & Aufhäuser Privatbankiers AG, Niederlassung Luxemburg
Northern Trust Global Services SE, Luxembourg branch	28 February 2019	Activities taken over by Northern Trust Global Services SE
Natwest Markets plc, Luxembourg branch	29 March 2019	Activities taken over by RBS International Depositary Services S.A.
The Bank of New York Mellon (International) Ltd, Luxembourg branch	12 April 2019	Transfer of activities to The Bank of New York Mellon SA/NV, Luxembourg branch
Banco BTG Pactual, Luxembourg branch	3 June 2019	Cessation of activities
ABLV Bank Luxembourg S.A.	2 July 2019	Judicial winding-up
Credem International (Lux) S.A.	15 August 2019	Cessation of activities
Nordea Bank S.A.	31 October 2019	Voluntary winding-up
State Street Bank Luxembourg S.C.A.	4 November 2019	Transfer of activities to State Street Bank International GmbH, Zweigniederlassung Luxemburg
DEPFA Pfandbrief Bank International S.A.	27 November 2019	Voluntary winding-up
Swedbank AB (publ), Luxembourg branch	18 December 2019	Cessation of activities
Crédit Agricole Corporate and Investment Bank, Luxembourg branch	27 December 2019	Cessation of activities

2.2. Development in banking employment

As at 31 December 2019, the number of employees in Luxembourg credit institutions amounted to 26,337, compared to 26,317 as at 31 December 2018.

Whereas employment remained stable in 12.1% of the banks, the staff increase in 48.6% of the banks offset the reduction in staff numbers recorded in 39.3% of the financial centre's banks.

Compared to the figures of December 2018, the distribution of employment according to men and women remained almost unchanged.

However, the number of employees with an academic background higher than the "BAC+5" (Master) degree increased (+4.0%), whereas employees whose education is equivalent or below the "BAC" degree declined by 7.9%.

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

Overall, banking activity developed well in 2019 as shown by the 6% increase of the balance sheet total. 60% of the financial centre's banks, representing 69% of the balance sheet total at the end of 2019, recorded a rise in their balance sheet. These notably include the largest banks of the financial centre as well as the banks active in asset management on behalf of private and institutional customers which, in the framework of the Brexit, benefitted from the transfer of certain activities from London to Luxembourg.

As regards assets, it is worth mentioning the increase of the level of loans and advances to customers (+9.1%) and loans and advances to credit institutions (+8.3%). As far as loans and advances to customers are concerned, it should be pointed out that the steady progress of banking intermediation benefitted all categories of customers, namely households, non-financial corporations and other financial corporations. The extent of the increase of loans and advances to credit institutions notably results from depositary and private banks which deposit their liquidity excess on a very short-term basis with other credit institutions, including within entities of the same group.

On the liabilities side, amounts owed to customers, consisting of deposits made by financial and non-financial corporations, private customers and/or retail customers, as well as of current accounts of investment funds, continued to rise sharply (+10.0%). It is worth noting that the automatic exchange of financial and tax information between Member States did not induce a reduction of this important funding source of Luxembourg credit institutions. On the contrary, since the introduction of many international initiatives regarding tax and financial transparency, it developed positively with respect to all types of customers.

Capital and reserves increased proportionally to the balance sheet total of Luxembourg banks, continuing to represent 7.3% of the balance sheet total.

As regards off-balance sheet exposures, the Luxembourg financial sector had loan commitments and financial guarantees amounting to EUR 150.4 billion as at 31 December 2019 (+12.7% over a year).

Aggregate balance sheet total - in million EUR

ASSETS	2018	2019 ⁹	Variation	LIABILITIES	2018	201910	Variation
Loans and advances to central banks and central governments	123,814	119,961	-3.1%	Amounts owed to central banks	7,057	5,848	-17.1%
Loans and advances to credit institutions	276,427	299,252	8.3%	Amounts owed to credit institutions	240,639	242,214	0.7%
Loans and advances to customers	232,104	253.138	9.1%	Amounts owed to customers	378,586	416,434	10.0%
Fixed-income transferable securities	119,408	122,183	2.3%	Amounts owed represented by securities	65,973	71,034	7.7%
Variable-yield transferable securities	7,759	5,914	-23.8%	Liabilities (other than deposits) held for trading	6,145	5,756	-6.3%
Fixed assets and other assets	15,399	21,327	38.5%	Provisions	3,030	3,069	1.3%
				Subordinated liabilities	3,954	2,750	-30.4%
				Other liabilities	12,419	14,827	19.4%
				Capital and reserves	57,107	59,842	4.8%
Total	774,911	821,775	6.0%	Total	774,911	821,775	6.0%

2.4. Development in the profit and loss account

With +0.3%, net profit for the year 2019 remained stable compared to the financial year 2018. It should be noted that 80% of the banks ended the year 2019 with a positive net profit (78% in 2018).

In aggregate terms, the positive development of income generated by the main banking activities, namely net interest income and net fee and commission income was not sufficient to offset the decrease of other net income and the sustained growth of general expenses, resulting in a 6.4% decline in profit before provisions.

Development in the	profit and loss	account - in I	million EUR
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	2018	Relative	2019 ¹¹	Relative	Varia	tion
	2018	share	2019"	share	in volume	in %
Net interest income	4,994	42%	5,380	45%	386	7.7%
Net fee and commission income	4,975	42%	5,109	42%	135	2.7%
Other net income	1,841	16%	1,560	13%	-281	-15.3%
Banking income	11,809	100%	12,049	100%	240	2.0%
General expenses	-6,737	-57%	-7,300	-61%	563	8.4%
of which: staff costs	-3,264	-28%	-3,548	-29%	284	8.7%
of which: general administrative expenses	-3,473	-29%	-3,752	-31%	279	8.0%
Profit before provisions	5,071	43%	4,749	39%	-323	-6.4%
Net creation of provisions	-712	-6%	-441	-4%	-271	-38.1%
Taxes	-705	-6%	-641	-5%	-64	-9.0%
Net profit for the year	3,654	31%	3,667	30%	13	0.3%

In 2019, net interest income (+7.7%) recorded a positive development year-on-year. The increase of this item was shared by 57% of the credit institutions, representing 73% of the aggregated net interest income of the financial centre. The positive development of the net interest income during the last years, despite the interest rates continuing to be at extremely low, or even negative, levels stems from, among others, a growth in the volume of the activities as well as an improved rate of return on assets for most of these banks. The application by the ECB of negative interest rates to the deposit facility continues to be a major challenge for credit institutions. In order to compensate the negative interests paid on assets, some banks now apply negative interest rates on deposits collected from professional customers and begin to gradually extend this practice to high net worth private customers. More than half of the banks apply negative interest rates on the deposits collected from financial institutional customers.

Net fee and commission income, which mainly results from asset management activities on behalf of private and institutional customers, including the financial services provided to investment funds, grew by 2.7%. The increase in net fee and commission income, mostly linked to the overall favourable development of financial markets in 2019 was shared by

51% of Luxembourg banks. This increase comes mainly from some credit institutions whose activity growth was strongly related to Brexit.

The development of **other net income** was marked again by strong volatility which notably results from non-recurring effects usually registered by a limited number of banks. The main reasons for the decline recorded by this item were, in order of importance: (i) the decrease of realised gains in the different securities portfolios and (ii) the decrease of dividends received.

General expenses continued their upward trend of the last years with a rise of 8.4% year-on-year. This growth in general expenses, which concerns both general administrative expenses (+8.0%) and staff costs (+8.7%), was registered by two-thirds of the banks. Nevertheless, the extent of this rise is mostly related to the mobilisation of human and technical means necessary to manage the banking activities transferred to some credit institutions in Luxembourg in view of Brexit. Excluding the Brexit effect, the total amount of general expenses would show a slight decrease, considering the decline in the number of banks to 127 entities as at 31 December 2019. Since 2014, the growth in general expenses accelerated, rising to an average annual rate of 8% compared to the average annual growth of 3.6% for the period from 2001 to 2018.

Net creation of provisions decreased by 38.1%. Whereas the extent of this reduction is attributable only to a limited number of banks, the positive development of this item largely contributed, like the previous year, to a mitigation of the decrease of profitability in the banking sector as a whole. Overall, assets of the Luxembourg banking sector are of good quality as shown by the non-performing exposure rates which was set at 0.6% of assets at the end of 2019.

The rise in expenses linked to the exercise of the banking activity in light of the reduction of margins gradually contributed to an erosion of profitability for an increasing number of the financial centre's banks. All in all, the Luxembourg banking sector's profitability deteriorated at aggregate level, as evidenced by the **cost-to-income ratio** which increased from 57% in 2018 to 61% in 2019.

Sixteen banks (21 banks at the end of 2018) recorded a cost-to-income ratio higher than 100%. They represent 2.9% (6% at the end of 2018) of the balance sheet total of the financial centre and 3.2% (8% at the end of 2018) of the overall employment in the banking sector.

Long-term development of profit and loss account - in million EUR

	2010	2011	2012	2013	2014	2015	2016	2017	2018	201912
Net interest income	4,761	4,960	4,671	4,281	4,066	4,496	4,717	4,886	4,994	5,380
Net fee and commission income	3,587	3,832	3,727	3,962	4,101	4,720	4,602	4,706	4,975	5,109
Other net income	1,201	76	1,401	2,213	2,217	2,262	3,038	2,166	1,841	1,560
Banking income	9,549	8,868	9,799	10,456	10,384	11,478	12,357	11,758	11,809	12,049
General expenses	-4,609	-4,789	-4,994	-5,198	-5,005	-5,942	-6,040	-6,253	-6,737	-7,300
of which: staff costs	-2,497	-2,535	-2,622	-2,745	-2,624	-3,065	-3,109	-3,161	-3,264	-3,548
of which: general administrative expenses	-2,112	-2,253	-2,372	-2,453	-2,381	-2,878	-2,931	-3,092	-3,473	-3,752
Profit before provisions	4,940	4,080	4,805	5,258	5,379	5,535	6,317	5,505	5,071	4,749
Net creation of provisions	-498	-1,572	-765	-865	-327	-577	-757	-956	-712	-441
Taxes	-625	-18	-503	-762	-799	-888	-820	-827	-705	-641
Net result for the financial year	3,817	2,490	3,537	3,631	4,253	4,070	4,740	3,722	3,654	3,667

2.5. Solvency and liquidity ratios

The banks of the Luxembourg financial centre continued to register prudential ratios that are significantly higher than the minimum required. As regards solvency, the average capital ratio amounted to 22.7% at the end of 2019.

Elements of own funds

	2018		2019	
	Amount (in million EUR)	Relative share	Amount (in million EUR)	Relative share
Own funds	48,342.6	100.0%	50,070.1	100.0%
Tier 1 capital	46,863.9	96.9%	48,977.1	97.8%
Common Equity Tier 1 capital (CET1)	45,705.4	94.5%	47,781.6	95.4%
Capital instruments that qualify as CETI capital	24,120.9	49.9%	26,625.3	53.2%
Retained earnings, other reserves, funds for general banking risks	24,025.4	49.7%	23,705.1	47.3%
Other accumulated comprehensive income	916.4	1.9%	859.5	1.7%
Minority interests	9.2	0.0%	0.0	0.0%
Adjustments of CETI deriving from prudential filters	-237.3	-0.5%	-83.2	-0.2%
(-) Intangible assets, goodwill and differed tax assets	-2,044.3	-4.2%	-2,118.8	-4.2%
(-) Holdings in financial instruments of financial sector entities	-208.5	-0.4%	-204.0	-0.4%
(-) Other deductions	-876.5	-1.8%	-1,002.3	-2.0%
Additional Tier 1 capital (AT1)	1,158.5	2.4%	1,195.5	2.4%
Capital instruments that qualify as ATI capital	1,158.5	2.4%	1,195.5	2.4%
Other items that qualify as AT1 capital	0.0	0.0%	0.0	0.0%
(-) Deductions from ATI capital	0.0	0.0%	0.0	0.0%
Tier 2 capital (T2)	1,478.7	3.1%	1,093.0	2.2%
Capital instruments and subordinated loans that qualify as T2 capital	1,526.6	3.2%	1,084.4	2.2%
Other items that qualify as T2 capital	26.4	0.1%	30.9	0.1%
(-) Deductions from T2 capital	-74.3	-0.2%	-22.3	0.0%

Risk-weighted exposure amounts

	2018		2019		
	Amount (in million EUR)	Relative share	Amount (in million EUR)	Relative share	
Total risk exposure amount	192,042.7	100.0%	220,455.9	100.0%	
Risk-weighted exposure amounts for credit risk, counterparty risk and dilution risks and free deliveries	165,679.6	86.3%	193,562.2	87.7%	
of which: Standardised Approach (STA)	117,247.2	61.1%	134,470.3	64.6%	
of which: Internal ratings-based approach (IRB)	48,431.4	25.2%	51,242.1	23.2%	
Risk-weighted exposure amounts for settlement risk	8.1	0.0%	1.6	0.0%	
Risk-weighted exposure amounts for position risk, foreign-exchange risk and commodity risk	1,443.4	0.8%	1,300.0	0.6%	
Risk-weighted exposure amounts for operational risk	22,587.3	11.8%	23,021.9	10.4%	
Risk-weighted exposure amounts for credit valuation adjustment risk	904.0	0.5%	1,068.0	0.5%	
Other risk-weighted exposure amounts	1,420.3	0.7%	1,502.3	0.7%	
Capital ratio	25.2%		22.7%		
Tier 1 capital ratio	24.4%		22.2%		
Common Equity Tier 1 capital ratio (CET1 ratio)	23.8%		21.7%		

Liquidity Coverage Requirement (LCR)

As at 31 December 2019, the weighted average of the LCR of Luxembourg banks and Luxembourg branches of banks that have their registered office outside the EU amounted to 184% as compared to 190% at the end of December 2018 (comparison made on a similar sample). The regulatory minimum to be observed amounted to 100% at the end of December 2019.

At aggregate level, there was a significant concentration of the liquid assets 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, calculated with the proxy tool developed by the EBA, amounted to 105% in December 2019, as against 128% at the end of December 2018 (comparison made on a similar sample). This proxy tool remains very approximate until new reporting tables, based on common rules that would introduce the NSFR as a binding regulatory standard as from 28 June 2021, are implemented.

· Asset encumbrance ratio

Luxembourg banks have a low asset encumbrance ratio. As at 31 December 2019, this ratio amounted to 7.22% on weighted and aggregate basis, showing that most of the Luxembourg banks' assets were unencumbered. Only seven 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.

Furthermore, credit institutions usually have significant liquidity reserves in the form of received and reusable collateral.

Chapter VII

Supervision of PFS



1. Investment firms

1.1. Development of investment firms in 2019

1.1.1. Development in the number of investment firms

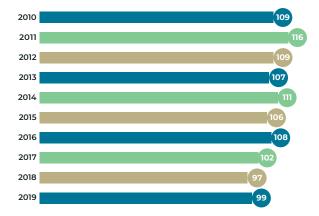
During the year 2019, the number of investment firms rose to 99 entities (against 97 entities at the end of 2018).

Eight entities were authorised as investment firms in 2019, against five new entities in 2018.

Six entities gave up their investment firm status during the year under review, compared to 10 in 2018. These six entities gave up their investment firm status for the following reasons:

- change or cessation of activities: the entities no longer needed an authorisation as investment firm, as they no longer fell within the scope of the Law of 5 April 1993 on the financial sector (two entities);
- · change into specialised PFS (two entities);
- closing of EU/EEA investment firm branches established in Luxembourg (two entities).

Development in the number of investment firms



The activity of private portfolio manager was the most widespread activity among investment firms with 85 entities authorised in this respect as at 31 December 2019. It is worth mentioning that five out of the eight newly registered entities adopted the status of private portfolio manager.

The number of CRR investment firms falling within the scope of the CRR¹ amounted to 24 as at 31 December 2019, compared to 23 as at 31 December 2018. Three out of the eight investment firms newly authorised in 2019 fall within the scope of the CRR.

1.1.2. Employment

For the third consecutive year, the total number of staff of investment firms decreased, from 2,115 people as at 31 December 2018 to 1,690 people at the end of December 2019. The

¹ Regulation (EU) No 575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.

20.1% decrease in 2019 is by far sharper than the decreases recorded in the previous years (6.9% in 2018 and 0.6% in 2017).

The growth in staff related to new authorisations as investment firm could thus not offset the downward development of total staff, which is, among other things, due to the deregistration from the official list of two investment firms with large staff numbers.

Employment in investment firms

Year	Number of investment firms	Total staff
2010	109	2,358
2011	116	2,411
2012	109	2,662
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	1,690

It should be noted that certain status changes that took place in 2019, including in particular the change of two investment firms into specialised PFS, did not entail a loss of jobs in the financial sector. These transfers of activities did not have an impact on employment in the financial sector as a whole, but only on the breakdown between the different categories of financial players.

It should also be noted that, as at 31 December 2019, about half the investment firms had 10 or fewer employees.

1.1.3. Development of balance sheets and profit and loss accounts

The provisional balance sheet total of all investment firms established in Luxembourg reached EUR 1,155 million² as at 31 December 2019, against EUR 876 million as

2 The branches established in Luxembourg by investment firms originating from another EU/EEA Member State and included, since 2009, in the total number of investment firms are not included in these figures. at 31 December 2018, representing a substantial increase of 31.80%. This growth is notably attributable to certain investment firms authorised in 2019 as well as to the rise in the balance sheet total of other players that have been active for a longer time.

Investment firms also recorded a positive development in their net results. Indeed, provisional net results amounted to EUR 100.0 million³ as at 31 December 2019, against EUR 65.5 million as at 31 December 2018, representing a substantial 52.79% growth.

However, almost one third of the investment firms recorded negative results as at 31 December 2019.

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

(in million EUR)	2018	2019	Variation in %
Balance sheet total	876	1,155	+31.80%
Net results	65.5	100.0	+52.79%

1.2. Prudential supervisory practice

1.2.1. Compliance by investment firms with the quantitative standards

Capital base

In accordance with Articles 24 to 24-10 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 base 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.

It should be borne in mind that the subordinated loans or the profits for the current financial year are not to be taken into account for the determination of the minimum

capital base of a professional of the financial sector⁴.

Based on the financial data that the 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 2019, the CSSF intervened at one investment firm for non-compliance with the legal provisions relating to capital base.

Capital ratios

Investment firms falling within the scope of Circular CSSF 07/290 (as amended by Circulars CSSF 10/451, 10/483, 10/497 and 13/568) defining the capital ratios pursuant to Article 56 of the Law of 5 April 1993 on the financial sector and investment firms falling within the scope of the CRR⁵ must permanently fulfil the capital ratio requirements.

In 2019, the CSSF intervened at six investment firms for non-compliance with the capital adequacy ratio. These entities regularised or are in the process of regularising the situation of non-compliance. The CSSF imposed an administrative fine of EUR 15,000 on one investment firm under Article 63 of the Law of 5 April 1993 on the financial sector for repeated failure to observe the legal requirements in relation to capital ratio. The CSSF attaches utmost importance to permanent compliance with the structural ratios that investment firms are required to observe and closely monitors the regularisation processes implemented by investment firms in case of capital adequacy ratio deficiency.

• Large exposure limits

In the context of the supervision of compliance with large exposure limits⁶, the CSSF did

4 Pursuant to Article 20(5) of the Law of 5 April 1993 on the financial sector.

not have to intervene in 2019 with any CRR investment firm.

1.2.2. Introductory visits

Introductory visits are made at the premises of investment firms that recently received their authorisation and, where appropriate, of existing players 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 2019, the CSSF visited four investment firms.

2. Specialised PFS

2.1. Development of specialised PFS in 2019

2.1.1. Development in the number of specialised PFS

During the year 2019, the number of specialised PFS decreased and reached 105 entities (against 109 entities at the end of 2018).

In 2019, six entities (*idem* in 2018) were authorised as specialised PFS, including two entities that had already been authorised as investment firm. However, 10 entities gave up their specialised PFS status during the year (five in 2018), one of them having been absorbed by another specialised PFS in the context of a merger.

Development in the number of specialised PFS



⁵ CRR investment firms (cf. point 1.1.1. of this chapter) no longer fall within the scope of Circular CSSF 07/290 but must comply with the requirements of Directive 2013/36/EU of 26 June 2013 (CRD IV) and Regulation (EU) No 575/2013 of 26 June 2013 (CRR) as regards capital ratios and large exposure limits.

⁶ Large exposure limits are governed by the CRR (Part Four relating to large exposures). However, they do not apply to investment firms that comply with the criteria set out in Article 95(1) or Article 96(1) of the CRR.

Among the specialised PFS, the statuses of corporate domiciliation agent and professional providing company incorporation and management services are the most prevalent with 84 and 89 entities, respectively, authorised under these statuses as at 31 December 2019 (2018: 86 and 92 entities, respectively), followed by the status of registrar agent with 63 entities authorised at that date (2018: 61 entities).

2.1.2. Employment

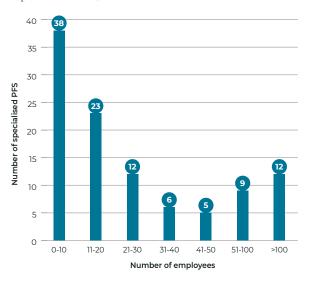
During 2019, the number of people employed by all specialised PFS rose by 703 to a total of 5,183 people, representing an increase of 15.7% as compared to the end of 2018.

Development in employment of specialised PFS

Year	Number of specialised PFS	Total staff
2010	113	3,552
2011	118	3,127
2012	124	3,046
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

As at 31 December 2019, 12 specialised PFS employed over 100 people (against 11 at the end of 2018) and 38 specialised PFS employed 10 or fewer people (against 43 at the end of 2018).

Breakdown of the number of employees per specialised PFS



2.1.3. Development of balance sheets and profit and loss accounts

The provisional balance sheet total of all specialised PFS decreased by EUR 868.08 million as compared to 2018 (-12.9%), mainly due to one entity affected by the restructuring of the group to which it belongs.

Over a one-year period, overall net results of specialised PFS fell by EUR 81.37 million (-21.9%).

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

(in million EUR)	2018	2019	Variation in %	
Balance sheet total	6,731.82	5,863.73	-12.9%	
Net results	371.51	290.14	-21.9%	

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, the authorisation of 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 2019, the CSSF identified cases of non-compliance with the legal provisions in this respect at four entities (against six entities in 2018). Their situation was regularised in a satisfactory manner.

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

In 2019, the CSSF intervened six times (against four in 2018) by way of observation letters due to situations of non-compliance in the day-to-day management of specialised PFS, notably linked, among others, 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.

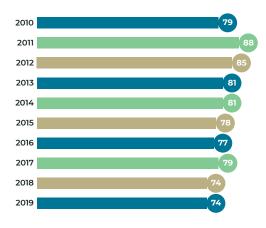
3. Support PFS

3.1. Development in 2019 of support PFS

3.1.1. Development in the number of support PFS

The number of support PFS remained stable with 74 entities as at 31 December 2019.

Development in the number of support PFS



Four support PFS were authorised in 2019. One support PFS was withdrawn from the official list following a merger and three support PFS renounced their authorisation.

Breakdown of support PFS by authorisation



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. The same applies to primary IT systems operators which are *ipso jure* authorised to carry out the activities of secondary IT systems and communication networks operators of the financial sector.

3.1.2. Employment

The number of staff of support PFS rose from 9,931 people as at 31 December 2018 to 10,005 as at 31 December 2019, representing an annual increase of 74 (+0.75%).

Development in support PFS employment

Year	Number of support PFS	Total staff
2010	79	8,249
2011	88	8,679
2012	85	9,016
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

3.1.3. Development of balance sheets and profit and loss accounts

The balance sheet total of all support PFS reached EUR 1,820.4 million as at 31 December 2019, against EUR 1,344.1 million as at 31 December 2018, i.e. a 35.44% growth which is mainly attributable to the merger by acquisition of a non-regulated company.

Support PFS' net results fell from EUR 82.7 million as at 31 December 2018 to EUR 68.2 million as at 31 December 2019, which represents a 17.53% decline. This development mainly stems from the drop in net profits of two major players. Excluding these players, net results of support PFS remained stable overall. It should be noted that 56 out of 74 support PFS recorded net earnings while 18 support PFS, including six entities which have been authorised over the last three years, ended the year with a net loss.

3.2. Prudential supervisory practice

The CSSF exercises its prudential supervision based on several instruments, including financial and ad hoc information, documents to be submitted in the context of the Risk Assessment Report (RAR) and the Descriptive Report (DR), introductory visits and on-site inspections (cf. Chapter XVI "Instruments of supervision"). This supervision also involves sending observation letters.

3.2.1. New arrangements for the transmission of documents

In order to modernise internal administrative processes, to simplify processing and optimise supervision, the CSSF published Circular CSSF 19/727 on 26 July 2019. The circular introduces new arrangements for the transmission of the documents required for each financial year-end of support PFS. Henceforth, documents are to be transmitted through the online Managed File Transfer (MFT) system, which is fast and highly secure, and by using a pre-established file transmission name convention.

3.2.2. Reminder regarding the characteristics of the internal audit function

In 2019, the CSSF repeatedly observed certain shortcomings as regards the internal audit function of several support PFS. By means of a circular letter, the CSSF thus reminded support PFS of the characteristics of this function and of its expectations, including in particular:

- the permanent nature of the internal audit function, in accordance with Circular IML 98/143 on internal control: the internal audit must perform the controls regularly and in the course of the financial year (in other words, no carry-over to the next financial year);
- the internal audit must cover the activities requiring an authorisation on a regular basis.

The support PFS is responsible for compliance with these points, irrespective of the mode of operation of the internal audit (own staff, group-level or external expert).

3.2.3. New prudential supervisory approach for support PFS

The CSSF published Circular CSSF 12/544 several years ago with the purpose of optimising the supervision of support PFS through a risk-based approach. The main objective was to improve the visibility of technological, organisational and legal risks that support PFS pose to other financial sector players by introducing the obligation to document them in a report and to associate an impact and probability assessment (Risk Assessment Report, RAR). In addition, the circular required a report on all key elements of the organisation of the supervised entity (Descriptive Report, DR).

After seven years of feedback, the CSSF noted repeatedly that the information received via both reports lacked quality and homogenisation, which limited the effectiveness of supervision and the possibilities of transversal analyses. The CSSF thus decided to replace the DR and RAR reports by supervisory tools that are easier to use and better calibrated for efficient stand-alone and sectoral supervision. These adaptations are in progress and will be finalised in 2020.

Chapter VIII

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.

In 2019, the CSSF published various circulars aiming, in particular, at supplementing the European legal and regulatory framework in relation to the exercise of payment services activities or the issue of electronic money, such as for example Circular CSSF 19/713 on the security measures for operational and security risks of payment services and Circular CSSF 19/712 on reporting requirements for fraud data.

The CSSF's prudential supervision aims to verify that payment institutions and electronic money institutions subject to its supervision observe all legal, regulatory and contractual provisions relating to their organisation and operation, including the mechanisms to be established for safeguarding the funds of payment service users and electronic money holders, on an ongoing basis.

Moreover, the CSSF continues its efforts to support payment institutions and electronic money institutions in the sometimes challenging deployment of IT solutions in order to bolster the security of transactions and the secure access to online payment accounts following the specific rules in this respect stemming from the transposition of Directive (EU) 2015/2366 of 25 November 2015 on payment services in the internal market (PSD₂).

2. Payment institutions

A total of 12 payment institutions incorporated under Luxembourg law were listed in the public register of payment institutions established in Luxembourg as at 31 December 2019 (against 10 as at 31 December 2018). Moreover, there were 10 branches established in other EU Member States by two of these authorised institutions as well as two branches established in Luxembourg of payment institutions authorised in other EU Member States.

The balance sheet total of these payment institutions amounted to EUR 1 billion as at 31 December 2019, representing a 28.2% increase compared to the end of 2018 when the balance sheet total reached EUR 819 million. Employment within the payment institutions increased by 12% in 2019.

3. Electronic money institutions

A total of eight electronic money institutions were listed in the public register of electronic money institutions authorised in Luxembourg as at 31 December 2019 (against six as at 31 December 2018). Moreover, there were one branch established in another EU Member State by an institution authorised in Luxembourg, as well as one branch established in Luxembourg of an electronic money institution authorised in another EU Member State.

The balance sheet total of electronic money institutions amounted to EUR 2.2 billion as at 31 December 2019, representing a 24% increase compared to the end of 2018 when the balance sheet total reached EUR 1.8 billion. Employment within the electronic money institutions increased by 10% in 2019.

Chapter IX Supervision of investment fund managers and UCIs

1. Authorised investment fund managers

Authorised investment fund managers (authorised IFMs)¹ comprise the following types of fund managers:

- management companies subject to Chapter 15 of the Law of 17 December 2010 relating to undertakings for collective investment (hereinafter 2010 Law);
- authorised alternative investment fund managers (AIFMs) subject to the Law of 12 July 2013 on alternative investment fund managers (hereinafter 2013 Law).

In Luxembourg, these IFMs are quite diverse in terms of size and investment strategies as well as in terms of exercised activities.

1.1. Development in numbers

The total number of authorised IFMs amounted to 318 as at 31 December 2019, compared to 314 as at 31 December 2018. This net increase of four entities is the result of 19 new authorisations and 15 withdrawals in 2019. One of these newly authorised entities exercises

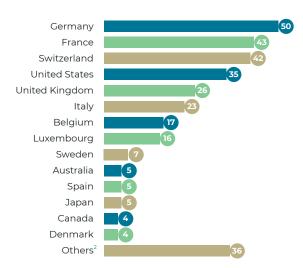
1 The statistics covered in this section exclude the 16 internally authorised managers, namely nine SICAVs which did not designate a management company under Article 27(1) of the 2010 Law and seven internally managed alternative investment funds (AIFs), in accordance with Article 4(1)(b) of the 2013 Law. Moreover, the 70 management companies subject to Article 125-1 of Chapter 16 of the 2010 Law managing UCIs which do not qualify as AIFs or UCITS or which fall within the scope of the exemption or transitional provisions of the 2013 Law are not counted in the statistics of this section as their activity is considered as not statistically significant. These management companies are hence included in Section 2 on other investment fund managers.

activities in the investment fund sector in Luxembourg for the first time.

1.2. Geographical origin

As in previous years, the main countries of origin of authorised IFMs are Germany, France, Switzerland and the United States of America. It should be pointed out that most newly authorised managers in 2019 are of US or Italian origin.

Geographical origin of authorised IFMs



2 Andorra (2), Austria (3), Bermuda (1), BVI (1), Chile (1), Finland (2), Greece (3), Guernsey (1), Ireland (1), Jersey (3), Liechtenstein (2), Malta (2), Mauritius (1), the Netherlands (2), Norway (2), Poland (1), Portugal (2), Qatar (2), Russia (2), South Africa (1), the United Arab Emirates (1).

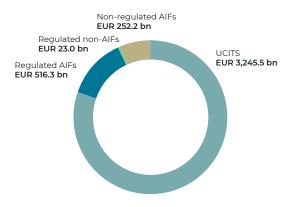
1.3. Development in employment

As at 31 December 2019, total staff of authorised IFMs³ amounted to 5,948 employees, as against 5,705 employees as at 31 December 2018, i.e. an increase of 243 employees. This rise results, on the one hand, from a general increase in the number of employees within the existing authorised IFMs and, on the other hand, from the establishment of new entities in 2019.

1.4. Assets under management

As at 31 December 2019, authorised IFMs managed assets of EUR 4,037.0 billion.

Breakdown of assets under management according to type of product



The category "Regulated non-AIFs" is composed of specialised investment funds (SIFs) governed by the Law of 13 February 2007 and investment companies in risk capital (SICARs) governed by the Law of 15 June 2004 which do not qualify as AIFs.

It is worth mentioning that the 50 most significant authorised IFMs in terms of assets under management manage 81.2% of all assets.

1.5. Investment strategies

The following table shows the breakdown of the investment strategies pursued by authorised IFMs according to the classifications laid down in Delegated Regulation (EU) No 231/2013.

3 The total staff figures of authorised IFMs do not include staff of these IFMs' branches.

Breakdown of investment strategies

Investment strategies	UCITS	Regulated AIFs and non-AIFs	Non- regulated AIFs	Total
Fixed-income transferable securities	34.2%	2.3%	0.0%	36.5%
Variable-yield transferable securities	27.5%	1.3%	0.0%	28.8%
Mixed transferable securities	16.0%	3.1%	0.0%	19.1%
Funds of funds	2.5%	2.3%	0.9%	5.7%
Real estate funds	0.0%	1.8%	1.0%	2.8%
Capital investment funds	0.0%	1.5%	1.6%	3.1%
Hedge funds	0.0%	0.0%	0.2%	0.2%
Others	0.2%	1.1%	2.5%	3.8%
Total	80.4%	13.4%	6.2%	100.0%

With respect to the UCITS managed by these authorised IFMs, a concentration of investment strategies relating to fixed-income transferable securities and variable-yield transferable securities (mixed transferable securities also consisting of these two types of assets) is observed.

1.6. Discretionary management

The 2010 Law and the 2013 Law allow authorised IFMs to benefit from an extended scope of activity, in particular for the provision of discretionary management services. As at 31 December 2019, 76 authorised IFMs (59 in 2018) provided this service for a total of EUR 79.8 billion of assets under management (compared to EUR 45.9 billion in 2018).

1.7. Financial situation

The provisional balance sheet total of all authorised IFMs, including their branches, reached EUR 17.0 billion as at 31 December 2019, as against EUR 14.5 billion as at 31 December 2018, i.e. an increase of 17.2%. This positive trend can be explained by the increase of the item "Result of the financial year" driven by growth in assets under management.

Provisional net results amounted to EUR 3.2 billion as at 31 December 2019, as against EUR 2.9 billion as at 31 December 2018,

representing an increase of 10.3%. Finally, out of the 318 authorised IFMs, 262 recorded a net profit and 56 recorded a net loss.

Development of the balance sheet total and of the net results of authorised IFMs

(in bn EUR)	2018	2019	Variation in %
Balance sheet total	14.5	17.0	17.2%
Net results	2.9	3.2	10.3%

The financial data of authorised IFMs also shows that:

- liquidities held by the authorised IFMs cover 90% of their own funds, evidencing a sound and prudent management;
- staff costs increased, due mainly to the strengthening of the substance of authorised IFMs.

2. Other investment fund managers

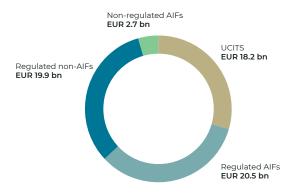
The following other investment fund managers (other IFMs) are present in Luxembourg:

- 593 registered investment fund managers (registered IFMs);
- 70 management companies subject to Article 125-1 of Chapter 16 of the 2010 Law: these management companies manage UCIs which do not qualify as AIFs or UCITS or which fall within the scope of the exemption or transitional provisions of the 2013 Law;
- nine self-managed UCITS investment companies (SIAGs);
- seven internally-managed alternative investment fund managers;
- one management company set up under Chapter 18 of the 2010 Law.

With EUR 61.3 billion, the share of assets managed by these other IFMs remains moderate compared to the authorised IFMs. It should also be noted that an additional EUR 89.4 billion are held in regulated AIFs and regulated non-AIFs which fall within the scope of the transitional provisions as defined

in Article 58 of the 2013 Law and which are consequently not linked to an authorised or registered IFM set up under the 2013 Law.

Breakdown of assets under management of other IFMs according to type of product



The following table shows the main investment strategies pursued by the other IFMs.

Breakdown of investment strategies

Investment strategies	UCITS	Regulated AIFs and non-AIFs	Non- regulated AIFs	Total
Fixed-income transferable securities	12.0%	4.2%	0.0%	16.2%
Variable-yield transferable securities	0.2%	4.2%	0.0%	4.4%
Mixed transferable securities	17.5%	17.9%	0.0%	35.4%
Funds of funds	0.0%	19.6%	0.2%	19.8%
Real estate funds	0.0%	2.8%	0.3%	3.1%
Capital investment funds	0.0%	14.2%	2.0%	16.2%
Hedge funds	0.0%	0.0%	0.0%	0.0%
Others	0.0%	3.0%	1.9%	4.9%
Total	29.7%	65.9%	4.4%	100.0%

With respect to all the funds managed by the other IFMs and similarly to authorised IFMs, the most representative UCITS investment strategies are strategies relating to fixed-income transferable securities and variable-yield transferable securities (mixed transferable securities also consisting of these two types of assets).

The trend differs significantly with respect to AIFs for which funds of funds and capital investment funds strategies represent a substantial proportion of the strategies as indicated in the above table.

EuVECA and EuSEF

In 2019, two new EuVECA manager registration requests under Regulation (EU) No 345/2013 of 17 April 2013 on European venture capital funds were submitted to the CSSF. One request has since been abandoned while the other is currently under review. The total number of EuVECAs registered in Luxembourg was nine as at 31 December 2019.

No registration request for a EuSEF manager, in accordance with Article 15 of Regulation (EU) No 346/2013 of 17 April 2013 on European social entrepreneurship funds, was submitted to the CSSF. As of today, no EuSEF has been registered in Luxembourg.

As at 31 December 2019, 156 EuVECAs managed by 99 managers registered in another EU Member State were distributed in Luxembourg. As regards EuSEFs, four funds are managed by four managers of another EU Member State. Among them, 56 funds domiciled in the United Kingdom and managed by 25 managers registered in the United Kingdom are/will be concerned by Brexit.

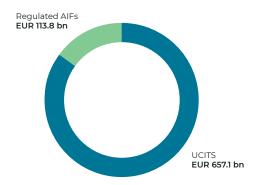
3. Cross-border activities4

3.1. IFMs established in another EU Member State

IFMs established in another EU Member State and managing Luxembourg-based UCITS or AIFs under Article 119 of the 2010 Law and/or Article 33 of the 2013 Law manage EUR 770.9 billion of assets.

4 The IFMs established in third countries, carrying out the management of Luxembourg regulated and non-regulated AIFs according to Article 44 of the 2013 Law and managing EUR 16.1 billion of assets, are excluded.

Breakdown of products managed on a cross-border basis⁵



IFMs established in another EU Member State and exercising cross-border activities in Luxembourg break down as follows:

- 76 managers manage UCITS;
- 112 managers manage regulated AIFs;
- 14 managers manage both UCITS and regulated AIFs.

Among these 202 IFMs, 20 managers originating from Germany, Denmark, Estonia, France, Ireland, Italy, Malta and Sweden provided management services for UCITS and AIFs via a branch in Luxembourg as at 31 December 2019.

3.2. IFMs established in Luxembourg

3.2.1. Freedom to provide services under the UCITS Directive

In 2019, 12 authorised IFMs (against 11 in 2018) notified their intention to carry out the functions included in the collective management activities in another EU/EEA Member State in the framework of freedom to provide services. The host Member States are the 30 EEA countries.

3.2.2. Freedom to provide services under the AIFMD

In 2019, 29 authorised IFMs (compared to 10 in 2018) notified their intention to manage AIFs under the freedom to provide services in one or several other EU/EEA Member States. The host Member States are the 30 EEA countries.

3.2.3. Free establishment of branches under the UCITS Directive and the AIFMD

As at 31 December 2019, 60 authorised IFMs (compared to 42 in 2018) were represented by a branch in one or several EU Member States under the UCITS Directive or the AIFMD. This corresponds to a total of 153 branches (compared to 86 in 2018).

As at 31 December 2019, total staff within these branches amounted to 1,285 employees, compared to 813 employees as at 31 December 2018.

4. Evolution of the UCI sector in 2019

As at 31 December 2019, 3,746 UCIs were registered on the official list, compared to 3,908 UCIs at the end of the previous year (-4.1%). This decrease is linked to a consolidation trend in the UCI sector, combined with a preference to create umbrella structures.

Out of the 3,746 UCIs, 2,452 had adopted an umbrella structure, representing a decline of 84 entities compared to the previous year. Single-compartment UCIs decreased by 78 entities.

The total number of fund units declined from 14,898 as at 31 December 2018 to 14,808 as at 31 December 2019. This decrease results from a decline in the number of single-compartment UCIs (-78 entities) and the net closure of 12 sub-funds within umbrella UCIs.

The positive developments on the financial markets (EUR 520.5 billion) have been strengthened by the inflow of new capital (EUR 133.8 billion) and have, in total, contributed to the increase of the total net assets of Luxembourg UCIs by EUR 654.3 billion over one year to reach EUR 4,718.9 billion as at 31 December 2019 (+16.1%).

Evolution of the total number, number of fund units and net assets of UCIs

Year	Total number of UCIs	Total number of fund units	Net assets (in billion EUR)
2009	3,699	12,472	1,858.4
2010	3,914	13,203	2,220.4
2011	4,121	13,595	2,120.0
2012	4,117	13,757	2,413.7
2013	4,181	14,048	2,645.7
2014	4,193	14,237	3,127.7
2015	4,160	14,496	3,543.6
2016	4,144	14,595	3,741.3
2017	4,044	14,728	4,159.6
2018	3,908	14,898	4,064.6
2019	3,746	14,808	4,718.9

Similarly to preceding years, the Luxembourg UCITS sector benefited from a positive balance between mergers in which the receiving UCITS is domiciled in Luxembourg (87 projects) and those in which the receiving UCITS is domiciled in another EU Member State (27 projects).

5. Prudential supervisory practice

5.1. Prudential supervision

The CSSF's prudential supervision aims to ensure that IFMs and UCIs subject to its supervision continuously observe all legal, regulatory and 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 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 agréés
 (approved statutory auditors)) 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.

5.2. Off-site supervision

5.2.1. Review of monthly, half-yearly and annual financial information

Circular CSSF 15/627 requires that all Luxembourg UCIs (UCITS, UCIs subject to Part II of the 2010 Law, SIFs and SICARs) provide, on a monthly basis, functional information and financial information on the activities of authorised funds and sub-funds (prudential report U1.1.).

Circulars IML 97/136, CSSF 07/310, CSSF 08/348 and CSSF 08/376 apply to half-yearly (prudential report K3.1.) and annual (prudential reports O4.1. and O4.2.) financial information.

The deadline to transmit the monthly financial information is 10 calendar days following the reference date, which is in principle the last day of each month. The deadline for communicating the half-yearly information is 45 calendar days after the reference date. As regards annual financial information, the reference date depends on the closing date of the financial year and of the legal deadline for filing the annual accounts. Consequently, the deadline for transmitting the information is four months for UCITS governed by Part I of the 2010 Law and six months for UCIs governed by Part II of the 2010 Law and SIFs.

Luxembourg UCIs must transmit the financial information electronically to the CSSF and, where applicable, through a duly appointed provider. The CSSF expects that the UCIs rigorously comply with the deadlines for the communication of the financial information to the CSSF. The CSSF also points out the importance of preparing the reports with due care so that they are accurate in form and content.

The CSSF carries out quality and coherence controls of the data received and, where necessary, takes sanction measures where the reporting entities do not comply with their obligations. In this context, the CSSF highlights that it publishes, on its website, several documents such as guidelines, control rules, examples and FAQs in order to clarify a certain number of recurring questions in relation to prudential reporting. Data collected in the framework of prudential supervision are shared with the BCL and STATEC for statistical purposes.

5.2.2. Supervision of the UCI activity based on annual and half-yearly reports, management letters and long form reports

In the framework of the review of annual and half-yearly reports, management letters and long form reports⁶, the CSSF had to take decisions in the form of injunctions, formal requests and recommendations regarding the *dirigeants* (managing directors) of certain UCIs and/or their IFMs. These decisions aimed at addressing the organisational deficiencies raised by the *réviseurs d'entreprises agréés* in the annual reports, in the long form reports or in the management letters.

In 2019, the CSSF sent 317 letters to require corrective measures in order to remedy more serious deficiencies identified during the review of the above-mentioned documents.

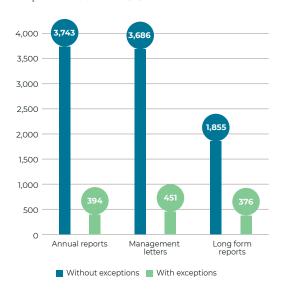
The CSSF's interventions via letter mostly addressed anti-money laundering and counter terrorist financing (AML/CFT) arrangements, which were a specific theme of the supervisory action in 2019, asset valuation and governance. The exceptions noted in relation to AML/CFT concerned, in particular, incomplete customer account documentation or internal procedures and processes not entirely fulfilling the regulatory requirements.

Besides these formal interventions and pursuant to a risk-based supervision, the CSSF also intervened via telephone or email to clarify or deal with less critical deficiencies.

The following chart highlights, per type of closing document, the number of documents in which one or several exceptions were noted 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 2019

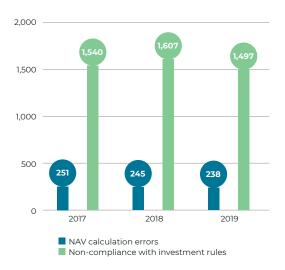


5.2.3. NAV calculation errors and non-compliance with investment rules

· Declarations made in 2019

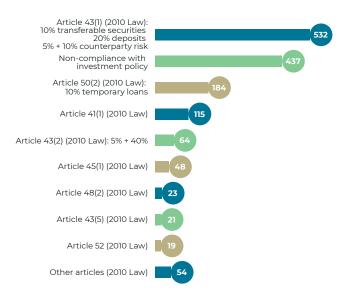
In 2019, the CSSF received 1,735 declarations on the basis of Circular CSSF 02/77, compared to 1,852 declarations in 2018, representing a decrease of 6.3%.

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.

Breakdown of the instances of non-compliance with investment rules in 2019



Failure to observe legal limits of diversification, holding and borrowing was the main source of non-compliance with investment rules with 945 cases (1,011 cases in 2018, i.e. -6.5%), followed by 437 cases of exceeding internal limits defined in sales documents (406 cases in 2018, i.e. +7.6%) and 115 cases of legal constraints breaches as regards asset eligibility (190 cases in 2018, i.e. -39.5%).

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

Compensation in 2017, 2018 and 2019

	Investors 2017 2018 2019			UCIs/Sub-funds		
				2017	2018	2019
Total amount of compensation following NAV calculation errors	8,522,213.3	40,167,579.9	5,806,656.7	2,571,664.4	16,153,598.6	4,037,199.2
Total amount of compensation following non-compliance with investment rules	2,067.5	0.0	0.0	1,630,269.2	7,650,066.8	3,943,713.5

In 2019, the amount of compensation paid out decreased as compared to 2018, during which specific cases requiring significant compensation had occurred. Overall, the total amount of compensation remained moderate as compared to the total amount of assets under management.

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

Techniques and instruments used by UCITS for the purpose of efficient portfolio management

At the end of 2019, the CSSF launched a survey to further assess the remuneration practices and associated operational controls relating to the techniques and instruments used by UCITS for the purpose of efficient portfolio management. The techniques and instruments referred to in this survey are in particular securities lending transactions and repurchase/reverse repurchase agreements. The survey has been conducted among a representative sample of around 50 IFMs, having Luxembourg-domiciled UCITS with significant amounts involved in these transactions.

Data linked to AIFM reporting and UCITS Risk Reporting

As regards AIFs, the CSSF and ESMA illustrated the results of the first analyses performed on

Luxembourg and European AIFs based on the AIFM reporting, during a joint presentation, to different Luxembourg investment fund sector organisations and players in July 2019.

As concerns UCITS, in December 2019, the CSSF organised a meeting with representatives of the investment fund industry to exchange, on the one hand, on its main conclusions and the key figures based on the UCITS Risk Reporting (URR) and, on the other hand, on the preliminary results of the stress tests performed by the CSSF on the liquidity of bond UCITS (including high yield and emerging markets funds). In the context of its work on liquidity stress tests, the CSSF also further analysed the methodologies and approaches that are in place at certain IFMs for liquidity stress testing.

In keeping with these meetings, the CSSF also published updated statistics based on the AIFM reporting and URR on its website. This type of publication will be issued on an annual basis.

Transparency in KIID and UCITS prospectus in relation to benchmarks

Following ESMA's update of the Q&A on the application of the UCITS Directive in relation to benchmark disclosures in the KIID at the end of March 2019, the CSSF sent a questionnaire to IFMs covering all Luxembourg UCITS in order to assess their level of compliance with the requirements of the KIID Regulation, as clarified in ESMA's Q&A. Moreover,

quantitative and qualitative information on benchmarks have been collected to complete the data available to the CSSF and used, among others, also in its work on closet index tracking.

In parallel, the CSSF continued its investigations aiming at identifying potential closet index trackers among UCITS in 2019. This alleged practice consists of IFMs claiming in their investor information documentation to manage their funds in an active manner while the funds are, in fact, i) staying very close to a benchmark and therefore implementing an investment strategy which requires less input from the investment manager and ii) charging management fees in line with those charged by actively managed funds. In this context, the CSSF requested some IFMs to improve transparency at the level of the KIID and of the prospectus for certain UCITS managed. The work of the CSSF on closet index tracking will continue in 2020.

5.3. Requirements as regards transparency in UCITS prospectuses

During the authorisation process of new UCITS or UCITS sub-funds, the CSSF attaches particular importance to the transparency of investment policies and the underlying risks in the prospectus.

This attention is based, in particular, on the requirements set out in Articles 47 and 151 of the 2010 Law. The CSSF had already specified its expectations on this subject in its Annual reports 2012 and 2014 in the context of highly leveraged UCITS.

The CSSF recalls that, in order to grant authorisation, it requires that information on the investment strategies, on the investment decision-making processes (including, in particular, the aspects of selection, allocation, weighting, diversification and possible risk budget), on the use of derivative financial instruments and on the UCITS' risk profile must be sufficiently granular. Indeed, in accordance with the principle of transparency, investors must be able to anticipate and to understand, based on the prospectus, the profile of the positions which will be taken by the manager, their purpose and the risks which arise therefrom.

This requirement is enhanced for UCITS which present more sophisticated investment

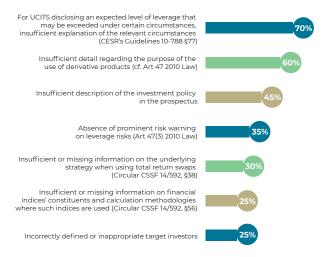
strategies, make greater use of derivative financial instruments or invest in complex products.

In this context, the CSSF would like to specify that the UCITS is in charge of ensuring compliance with the requirements of the law as regards transparency by taking into account the importance the CSSF attaches to this topic.

During 2019, the CSSF noted that the draft prospectuses accompanying authorisation requests were still regularly unsatisfactory in terms of details and transparency quality for some more complex investment strategies. Such deficiencies imply additional specific reviews which may extend the processing phase.

Thus, on a representative sample of draft prospectuses linked to highly leveraged UCITS, the CSSF observed the deficiencies illustrated in the graph below.

Breakdown of the transparency issues observed in the draft prospectuses of highly leveraged sub-funds received in 2019



5.4. Review of the IFMs' risk management procedures

Following the entry into force of Circular CSSF 18/698 on the authorisation and organisation of investment fund managers incorporated under Luxembourg law, and more particularly the application of sub-section 5.3.1.5. of this circular as regards the Risk Management Procedure (RMP) to be communicated to the CSSF by IFMs, the CSSF noted a certain disparity in the format and content received in the context of authorisation requests by new

IFMs or strategy extension requests by existing IFMs and, through the review of a sample of IFMs, of the annual updates of the RMP.

In this respect, the CSSF would like to clarify, in particular, the following elements.

- Authorised IFMs licensed under both Chapter 15 of the 2010 Law and Chapter 2 of the 2013 Law must communicate to the CSSF two different RMPs: one for UCITS pursuant to Circular CSSF 11/512, and one for AIFs managed in accordance with Circular CSSF 18/698. Companies may thus not merge these two documents into one document only.
- The RMP of an IFM managing AIFs must follow the scheme set out in Annex 1 of Circular CSSF 18/698 and it must include as many "specific complementary sections" as there are different strategies managed by the IFM. Moreover, the RMP must describe the techniques, tools and arrangements used to identify, measure, manage, monitor and report a certain number of risks identified in that circular.
- As the regulation applicable to IFMs only provides few specifications on the techniques, tools and arrangements required for the management of the different risks, the deficiencies identified reflect the expectations of the CSSF as regards "sound practices" or "market practices".

Most frequent deficiencies identified during the RMP reviews in the context of IFM authorisation or strategy extension requests



Focusing on the main weaknesses identified, it can be noted, in particular, that more than half of the IFMs did not provide a satisfactory explanation on the systems used in relation to stress tests, liquidity risk management, operational risk management and counterparty risk management in their RMP.

Thus, 60% of the IFMs do not provide details on their stress tests. In many circumstances, further developments are required for both market risk and liquidity risk. It should also be noted that stress tests must refer to individual assets and to the portfolio in its entirety.

59% of the IFMs under review describe an inadequate process for the calculation of the funds' liquidity risk. An IFM must, however, be in a position to assess the liquidity of each of the assets of its AIFs by taking into account the time required to sell them and the price at which they could be sold. Also, at fund level, the IFM must be in a position to verify that its investment policy is in line with its redemption policy.

As far as leveraged closed-end funds are concerned, an exit strategy plan must be provided. Moreover, the liquidity of the assets and of the investment fund must be regularly assessed.

56% of the IFMs have a very limited approach to operational risk management. They consider that operational risk originates only from their delegates (central administration, transfer agent, etc.) and that the KPIs received from these delegates are sufficient as operational risk management arrangement. In this context, the CSSF considers that it is necessary to establish an operational risk mapping and an incident reporting and incident handling process.

The reason that 52% of the IFMs under review have not provided a sufficiently detailed counterparty risk management (OTC) might be that investments in derivative financial instruments were used for hedging purposes (examples: hedge share class, currency, etc.). This does however not imply that a counterparty selection and collateral follow-up policy should not be in place.

Two other significant areas also show deficiencies.

As far as the delegation of risk management (RM) activities is concerned, 49% of the IFMs under review indicated that they used the "support" of a third-party, the concept of "support" not being clearly defined in the RMP however. In this context, it should be mentioned that the CSSF verifies in such cases that due diligences have been performed on the service provider of such support function and that the interpretations of the RM analysis are carried out by the IFM.

Finally, 40% of the IFMs under review did not provide sufficient details on the implication of the RM function in the investment/ disinvestment process of illiquid assets. Where investment management is performed by another entity, including an entity of the group, the RMP seldom provides detailed information on the involvement of the IFM's RM function in the risk identification and risk assessment at the moment of purchase/sale of the asset.

Other improvement issues that have been identified are detailed below.

Lack of detail on leverage levels

43% of the IFMs under review did not provide details on the policy on the use of leverage. However, information on the level of use of leverage allows the CSSF assessing whether the market risk management method is appropriate. The problem appears, in particular, when such strategies are requested for new funds whose investment policy has not yet been clearly defined.

· Lack of detail on financing risk

In the context of a fund's liquidity risk management, it is important to make sure that financing risk, i.e. the risk linked to loans and commitments of investors, is covered. The management process of the loans taken out for investment must be managed in order to monitor any renewal at maturity or subscription with other lenders. This process must be detailed in the RMP. 33% of the IFMs under review did not provide sufficient details on financing risk.

· Lack of detail on market risk

25% of the IFMs under review did not provide sufficient details on market risk management

at the level of the investment fund or at the level of individual assets. The main indicators covering investment risk must be identified and reported in the RMPs.

Incomplete risk management procedure

25% of the IFMs under review did not follow the new RMP structure laid down in Circular CSSF 18/698. The RMP provided does thus not always cover all of the items listed in Annex 1 of Circular CSSF 18/698. The specific section for each type of strategy is often missing: strategies are grouped, which does not allow having an adequate view of the management of the specific risks of each strategy.

In this context, the CSSF reminds that the RMP for the managed AIFs includes a "General section: governance and organisation of the risk management function" and a "Specific complementary section: risk management policy in respect of strategies" depending on the strategies of the managed AIFs. Pursuant to point 215 of Circular CSSF 18/698, this specific section must be created for each type of investment strategy of the AIFs, as defined in Annex IV of Delegated Regulation (EU) n° 231/2013 (hedge fund strategies, private equity strategies, real estate strategies, fund of fund strategies or other strategies).

Moreover, the description of the specific section is often too general, and it does not focus on the specific items linked to each of the investment strategies concerned. In this context, the CSSF requests IFMs to further develop the general section and to complete the specific complementary section only with the risk management policy items specifically applied to the associated strategy. More particularly, the descriptions of the asset valuation policy, or of the operational risk management, do not sufficiently focus on the specificities of the risks identified on the strategies concerned.

· Lack of detail on the risk profile

24% of the IFMs under review did not provide sufficient details on the implementation of the risk profile by including the role of the permanent risk management function in this process, the existence of limits and the confirmation that this risk profile has indeed been created before the launch of the fund concerned.

· Resources

22% of the IFMs under review had to provide complementary information on the RM qualifications, either of the *dirigeant* (director) in charge of RM, or of the person responsible (non *dirigeant*) for the permanent risk management function. The number of persons involved in risk management was not always clearly indicated.

As this exercise, completed in 2019, was the first RMP communication exercise for IFMs, the CSSF expects IFMs to review the quality of this document in light of the requirements set out in Annex 1 of Circular CSSF 18/698 and to take them duly into account in the context of the drawing-up of the RMP, for both authorisation or strategy extension requests, as well as for the annual update.

5.5. On-site supervision

The "UCI on-site inspection" department continued to increase its staff, with 19 agents as at 31 December 2019, as against 13 as at 31 December 2018. The team carries out on-site inspections consisting of an in-depth review of the IFMs' business models and governance as well as thematic AML/CFT on-site inspections.

The "Prudential supervision and risk management" department performs thematic on-site inspections on risk management, on the procedures related to Circular CSSF 02/77 and money market funds⁷. Moreover, the "On-site inspection" department of the CSSF may perform thematic inspections at IFMs in relation to depositary bank and central administration activity and MiFID regulation.

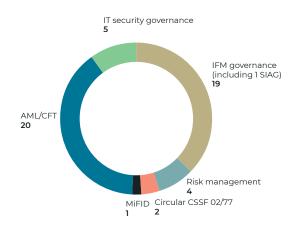
5.5.1. Statistics

In 2019, the CSSF carried out 51 on-site inspections at IFMs⁸ based on a long-term inspection plan using a risk-based approach.

The inspected authorised IFMs represented about 19% of the total assets under management of all authorised IFMs. Moreover, the inspections concerned 12 authorised IFMs whose assets under management exceeded EUR 10 billion.

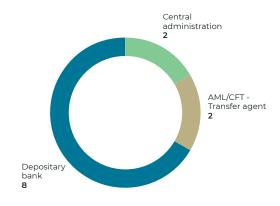
7 Within the meaning of Regulation (EU) No 2017/1131 of 14 June 2017.

Thematic on-site inspections performed in 2019 at IFMs (including self-managed SICAVs)



The CSSF also performed 12 on-site inspections at depositary banks and central administrations.

Other on-site inspections performed in 2019 at UCI service providers⁹



5.5.2. Main findings

In the context of the on-site inspections relating to governance of IFMs, the CSSF observed that the requirements regarding best execution are not complied with by all IFMs, in particular those specialised in third-party funds management. In this context, the CSSF would like to remind that these provisions apply to all IFMs, regardless of their business model.

⁸ Including one SIAG.

⁹ These on-site inspections were carried out at credit institutions, investment firms or specialised PFS.

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As far as supervision of delegates is concerned, the CSSF noted that the continuous follow-up performed by certain IFMs on their delegates is based only on the performance of a periodical due diligence, and that it does not include the implementation of an ongoing monitoring procedure of the delegated activities.

The CSSF also noted that management information did not always refer to all the subjects listed in Circular CSSF 18/698. The analysis of this management information is not always reported on a monthly basis during the IFM's executive committee meetings.

Moreover, the CSSF reminds that it expects all IFMs to have performed, by now, their analysis on the compliance of their organisation and their functioning as per the provisions set out in Circular CSSF 18/698 and that measures, if any, have been taken to ensure full compliance to them.

Finally, as regards on-site inspections concerning AML/CFT, the main findings are detailed in Chapter XIX "Financial crime".

Chapter X

Supervision of securitisation undertakings

1. Development of authorised securitisation undertakings

During 2019, 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.

Two multiple-compartment securitisation undertakings have been granted authorisation by the CSSF in 2019, so that 33 securitisation companies were registered on the official list as at 31 December 2019, against 31 entities at the end of 2018. The balance sheet total of authorised securitisation undertakings amounted to EUR 47.7 billion at the end of 2019, representing an increase of EUR 2.2 billion against 2018.

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, baskets of shares or units of UCIs, 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

Regulation (EU) 2017/2402 of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised (STS) securitisation, applicable since 1 January 2019, was implemented via the Law of 16 July 2019.

The European Commission is empowered to supplement Regulation (EU) 2017/2402 by adopting regulatory and implementing technical standards. In this context, it published the following documents:

- delegated regulation supplementing Regulation (EU) 2017/2402 with regard to regulatory technical standards on securitisation repository operational standards for data collection, aggregation, comparison, access and verification of completeness and consistency;
- delegated regulation supplementing Regulation (EU) 2017/2402 with regard to regulatory technical standards specifying the details of the application for registration of a securitisation repository and the details of the simplified application for an extension of registration of a trade repository;

- implementing regulation laying down implementing technical standards with regard to the format of applications for registration as a securitisation repository or for extension of a registration of a trade repository pursuant to Regulation (EU) 2017/2402;
- delegated regulation supplementing Regulation (EU) 2017/2402 and laying down regulatory technical standards specifying the information to be provided in accordance with the STS notification requirements;
- implementing regulation laying down implementing technical standards with regard to templates for the provision of information in accordance with the STS notification requirements;
- delegated regulation supplementing Regulation (EU) 2017/2402 with regard to regulatory technical standards specifying the information and the details of a securitisation to be made available by the originator, sponsor and SSPE (Securitisation Special Purpose Entity);
- implementing regulation laying down implementing technical standards with regard to the format and standardised templates for making available the information and details of a securitisation by the originator, sponsor and SSPE.

The following delegated regulations, published in the Official Journal of the European Union on 29 May 2019 and 6 November 2019, entered into force on 18 June 2019 and 26 November 2019, respectively:

- Commission Delegated Regulation
 (EU) 2019/885 of 5 February 2019
 supplementing Regulation (EU) 2017/2402
 with regard to regulatory technical standards
 specifying information to be provided to a
 competent authority in an application for
 authorisation of a third party assessing STS
 compliance;
- Commission Delegated Regulation
 (EU) 2019/1851 of 28 May 2019 supplementing
 Regulation (EU) 2017/2402 with regard
 to regulatory technical standards on the
 homogeneity of the underlying exposures in
 securitisation.

On 8 January 2019, ESMA published the final report on the cooperation, exchange of information and notification between national competent authorities and the European Supervisory Authorities (ref.: ESMA33-128-557). This report was submitted to the European Commission for approval.

On 31 January 2019, ESMA published a document of Q&As relating to the application of Regulation (EU) 2017/2402 (ref.: ESMA33-128-563) which provides technical clarifications to help the entities concerned to fill in the templates to be used. The Q&As were updated on 27 May 2019 and 15 November 2019.

Finally, it should be noted that the EBA Guidelines on the STS criteria for ABCP (Asset Backed Commercial Papers) securitisation (ref.: EBA/GL/2018/08) and for non-ABCP securitisation (ref.: EBA/GL/2018/09), published on 12 December 2018, entered into force on 15 May 2019 and were implemented via Circular CSSF 19/719.



1. Development of pension funds in 2019

1.1. Major events in 2019

As at 31 December 2019, 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.

Eleven new pension schemes within existing pension funds have been authorised by the CSSF during the year. Four pension schemes have been notified for the purpose of exercising cross-border activities in accordance with Article 11 of Directive (EU) 2016/2341 of 14 December 2016. In 2020, the CSSF expects cross-border activities to further develop, either through the creation of new pension funds or the addition of new pension schemes to existing pension funds for EU or third-country sponsoring undertakings.

Directive (EU) 2016/2341 of 14 December 2016 on the activities and supervision of institutions for occupational retirement provision was transposed into Luxembourg law by the Law of 15 December 2019 amending the above-mentioned Law of 13 July 2005. The operating institutions for occupational retirement provision must comply with the new legal framework, in particular as regards the system of governance, the protection of the rights of members and beneficiaries, the information to be provided to prospective members, members and beneficiaries as well

as for cross-border and national transfers.

The Law of 15 December 2019 thus introduced the requirement for pension funds to have in place an effective system of governance proportionate to the size, nature, scale and complexity of the activities. Pension funds must set up three key functions, i.e a risk management function, an internal audit function and an actuarial function if the requirements under Article 57–6 are fulfilled and they must implement written policies in relation to each of these functions and to any outsourced activities.

In addition to the details and adjustments relating to the information to be provided to members, prospective members and beneficiaries, a major change concerns the "Pension Benefit Statement". To promote transparency, the legislator introduced this accurate and concise document containing key information for each member, which takes into account the specific nature of each national pension system and of relevant national social, labour and tax law. The "Pension Benefit Statement" must be transmitted, free of charge, at least once a year to the members.

Another essential item resulting from the amendment of the Law of 13 July 2005 concerns the introduction of a specific framework to comply with in case of national or cross-border transfers of a pension scheme's liabilities, technical provisions and other obligations and rights, as well as corresponding assets or cash equivalent thereof, to a receiving pension fund.

1.2. Pension funds activities

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

As at 31 December 2019, three pension funds managed cross-border pension schemes. These pension funds provided their services to sponsoring undertakings established in Germany, the United Kingdom, Belgium, Spain, Italy, Ireland, the Netherlands and Portugal as well as to non-EU sponsoring undertakings.

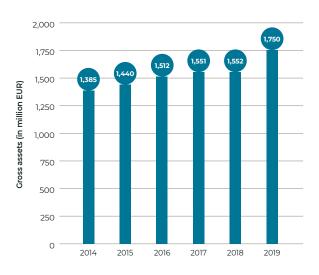
Ten out of the 12 pension funds registered on the official list have adopted the legal form of a pension savings association and two have adopted the legal form of a pension savings company with variable capital.

1.3. Development of pension fund assets

At the end of 2019, gross assets of pension funds amounted to EUR 1,750 million against EUR 1,552 million at the end of 2018, representing a 12.8% growth.

The assets of cross-border pension schemes amounted to EUR 660 million at the end of 2019 against EUR 560 million as at 31 December 2018.

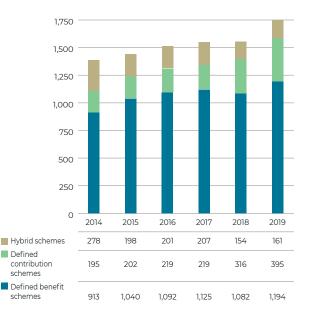
Development of pension fund assets



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

At the end of 2019, gross assets of the defined benefit schemes amounted to EUR 1,194 million and represented 68.2% of the overall gross assets of pension funds. The assets of defined contribution schemes amounted to EUR 395.5 million and hybrid schemes totalled EUR 160.5 million as at 31 December 2019.

Development of assets according to the type of pension scheme

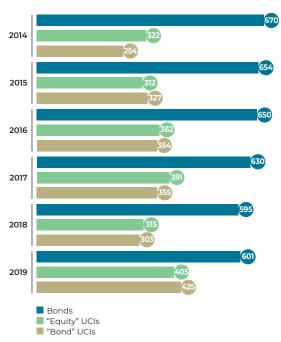


1.5. Allocation of pension fund assets

In 2019, pension funds invested mainly in investment funds, representing EUR 927 million, 43.7% (EUR 405 million) of which were exposed to the equity market, 45.8% (EUR 425 million) to the bond market and 10.5% (EUR 97 million) were invested in mixed funds, money market funds and funds with alternative investment policies.

Total investment of pension funds in bonds represented EUR 597 million, i.e. 39% of the total gross assets of pension funds.

Allocation of pension fund assets (in million EUR)

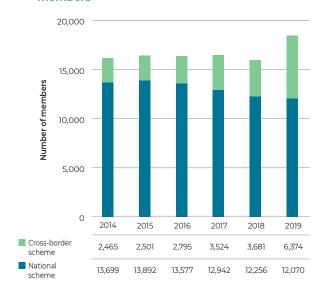


1.6. Development in the number of pension fund members

At the end of 2019, the pension funds had 18,444 members against 15,937 members as at 31 December 2018. This increase was mainly due to the authorisation of 11 new pension schemes during the year. This rising trend also reflects the increasing interest of small and large undertakings to take the initiative to set up a professional old-age savings scheme for their employees.

An analysis of the population of the members of pension funds supervised by the CSSF shows that the proportion of international members (34.6% of the population of the members of pension funds, i.e. 6,374 members as at 31 December 2019) increased compared to the previous years, as a result of the growing globalisation of certain pension funds via schemes offered in multiple host countries. As at 31 December 2019, 29 pension schemes operated on a cross-border basis, representing 59.2% of the total number of active schemes.

Development in the number of pension fund members



2. Development of liability managers in 2019

In 2019, no new liability manager has been registered on the official list of professionals authorised to act as liability managers for pension funds subject to the Law of 13 July 2005.

The number of liability managers for pension funds authorised by the CSSF amounted to 18 as at 31 December 2019.



1. Application of the new prospectus regulation

In the framework of Regulation (EU) 2017/1129 of 14 June 2017¹ (hereinafter, the Regulation), the CSSF contributes, through different ESMA working groups, to the development of implementing measures regarding the Regulation and the ESMA publications in order to promote common positions between competent authorities in the application of the Regulation.

As far as the implementing measures are concerned, ESMA had already published, on 28 March 2018, a technical advice for the adoption of various delegated acts provided for by Regulation (EU) 2017/1129 and, on 17 July 2018, draft regulatory technical standards in the areas defined by the Regulation with a view to their adoption through delegated acts. As a consequence, Regulation (EU) 2017/1129 was supplemented by Delegated Regulation (EU) 2019/979 of 14 March 2019² and Delegated Regulation (EU) 2019/980 of 14 March 2019³. Finally, on

29 March 2019, ESMA published a technical advice on a possible delegated act specifying the content of the information to be included in the documents to be published, in order to benefit from an exemption from the obligation to publish a prospectus in connection with a takeover by means of an exchange offer, a merger or a demerger.

As regards the application of Regulation (EU) 2017/1129, ESMA notably published regularly updated Questions and Answers and, on 1 October 2019, guidelines on risk factors. Guidance on the requirements of the annexes to Delegated Regulation (EU) 2019/980 will be published in 2020, following the consultation and work carried out in 2019.

In the months preceding the entry into force of the new Prospectus Regulation on 21 July 2019, the CSSF agents concerned followed internal training to familiarise themselves with the new aspects of the Regulation, relating in particular to its application, the summary, the base prospectus, the universal registration document, the simplified regimes, the incorporation by reference, the supplements, the risk factors and the delegated regulations.

The relevant internal procedures of the CSSF have also been revised and adapted to reflect the new requirements.

The document to be used to submit an approval file (Entry Form) has been completely modified. The Entry Form is now a dynamic PDF file that allows combining in a single document all the information needed to create a file and collecting metadata as provided for in Annex VII to Delegated Regulation (EU) 2019/979. The CSSF's information

- 1 Regulation (EU) 2017/1129 of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/EC.
- 2 Delegated Regulation (EU) 2019/979 of 14 March 2019 supplementing Regulation (EU) 2017/1129 with regard to regulatory technical standards on key financial information in the summary of a prospectus, the publication and classification of prospectuses, advertisements for securities, supplements to a prospectus, and the notification portal, and repealing Delegated Regulation (EU) No 382/2014 and Delegated Regulation (EU) 2016/301.
- 3 Delegated Regulation (EU) 2019/980 of 14 March 2019 supplementing Regulation (EU) 2017/1129 as regards the format, content, scrutiny and approval of the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Regulation (EC) No 809/2004.

systems have been adapted to ensure the processing of the new documents. Changes have also been made as regards communication with ESMA in order to collect and transmit metadata relating to the approved files.

The CSSF is continuing its work in this area so that depositors may benefit, in the near future, from the advantages of a specific desk which will allow online filing of files relating to the approval of prospectuses for securities. This new information system aims to improve the quality of the submissions by guiding the filing entities through the form and the transmission of the documents. It will also enable them to track in real time the transmitted file. Moreover, in accordance with the requirements of Article 11 of Delegated Regulation (EU) 2019/979, the CSSF will collect directly the relevant accompanying data via the desk for the classification of the prospectuses in accordance with the tables set out in Annex VII to this Regulation. The CSSF will ensure, as far as possible, that the data entered by a filing agent for a given file can be re-used by the latter for a similar file in order to avoid re-entering of the same information. In the future, the implementation of a "document pool" for frequent issuers will allow a simplified transmission of documentation to the CSSF, such as for documents incorporated by reference on a recurrent base. A pilot phase with some of the most active filing entities is planned for 2020 in order to collect their feedback. As the CSSF opted for an Agile approach to develop its applications, this desk will evolve constantly and its functionalities will be implemented progressively.

The entry into force of a new regulation is always followed by a phase of uncertainty regarding its practical application. Thanks to comments and requests for advice, the CSSF agents concerned have been able to progressively familiarise the depositors with the requirements of the new Regulation. Agents are also available per phone to directly help out, where possible, the persons in charge of drawing up prospectuses. By supporting depositors in this way, the CSSF contributes to continuously improve the quality of the prospectuses for securities.

In this context, it is noteworthy that the number of requests for advice rose by 48% compared to 2018 (198 requests in 2019 against 134 in 2018), which demonstrates the desire of issuers to comply with the new requirements. Most of the requests were related to the use of documents such as the base prospectus in several parts, the supplements to registration documents, the publication of prospectuses, the use of hyperlinks and the description of risk factors.

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

In its press release 20/064 of 17 February 2020, the CSSF presented the results of its 2019 enforcement campaign for financial and non-financial information published by issuers of securities for 2018. The main observations of these examinations covered issues relating to the application of IFRS 9 "Financial Instruments" and IFRS 15 "Revenue from contracts with customers" whose application became mandatory for annual periods beginning on or after 1 January 2018, but also issues related to non-financial information required from certain issuers by the Law of 23 July 2016 on the disclosure of non-financial and diversity information by certain large undertakings and groups.

· Enforcement of financial information

On 19 December 2019, the CSSF published a communiqué that informed on the priorities for its enforcement campaign of financial information published by issuers of securities under its supervision. These priorities, which include those discussed at European level

⁴ https://www.cssf.lu/en/2020/02/results-of-the-enforcement-of-the-2018-financial-information-published-by-issuers-subject-to-the-transparency-law/.

and communicated by ESMA, often represent challenges for issuers when preparing their financial information, but also for the CSSF during its controls. For the 2020 campaign, the review of the first application in the financial statements of the issuers concerned of IFRS 16 "Leases" is of particular importance. Indeed, according to this standard, lessees must recognise most of their lease contracts directly in the balance sheet, without distinguishing between finance leases and operating leases. The implementation of this standard, which impacts financial statements, key indicators, financial ratios and financial communication in general, brought about changes in the companies' organisation, processes, controls and systems, but also in investment strategy and lease contract management. The monitoring of the application of IFRS 15 and IFRS 9 mentioned above, in relation to the results of the 2019 campaign, also remains one of the priorities for the review of the 2019 financial statements.

Finally, for the periods starting 1 January 2020, the annual reports of the issuers subject to the Transparency Law must be prepared in XHTML format and, if they include consolidated IFRS financial statements, the latter must be marked up with XBRL tags. Although the annual reports in this new format are only to be published in 2021, issuers should use the year 2020 to complete preparations to this change.

Enforcement of non-financial information

Since 1 January 2017, certain large undertakings are subject to the Law of 23 July 2016 on the disclosure of non-financial information, transposing Directive 2014/95/EU of 22 October 2014 (NFRD)⁵. This directive is one of the first legislative acts for sustainable finance, thereby recognising the need for undertakings to improve their disclosure of environmental and social information.

Disclosure, by undertakings, of information on social and environmental issues notably, must contribute to the transition towards a sustainable economy, by combining profitability with environmental protection

5 Directive 2014/95/EU of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups. and social justice and thereby allowing investors and stakeholders to assess long-term value creation and risk exposure to sustainability.

In the context of the examination of information published by issuers of securities, the CSSF pays special attention to this type of information. However, the following must be taken into account:

- the NFRD sets the minimum framework of the information to include, and allows for flexibility when disclosing non-financial information;
- as foreseen by the directive, the European Commission issued non-binding guidelines on the methodology for reporting non-financial information;
- by inviting companies to use "widely accepted, high quality reporting frameworks, and this partially or in full compliance," these guidelines only provide hints as regards the minimum rules to follow to comply with the NFRD.

Presenting relevant, useful and comparable disclosure of non-financial information for the user, in compliance with the NFRD, is thus not an easy task for the issuers concerned. Indeed, recent extensive reviews, including that performed by the CSSF⁶, demonstrated that entities do not always present all the information needed by the users and sometimes present information that is not relevant.

In the light of this situation, it is clear that the need for high-quality non-financial information, expressed by all the stakeholders (investors, data providers, civil society, etc.) keeps growing. This need stems both from the fact that investors need to better understand the stakes and potential risks relating to these issues, and from the development of financial products that aim to positively act on environmental and social issues.

Moreover, as announced in the European Commission's Green Deal, it is important that companies and financial institutions improve

⁶ Cf. communiqué "Examination of non-financial information published for 2018".

their disclosure of non-financial information in order to better inform investors on the sustainability of their investments.

Progress is also expected to be made at regulatory level. Indeed, the conclusions of the fitness check on the EU framework for public reporting by companies showed that the NFRD does no longer adequately meet the requirements expressed. Thus, the European Commission pledged to revise the NFRD in 2020 as part of the strategy to strengthen the basis of sustainable investment. This revision follows the current general trend where many organisations and stakeholders call for a new regulatory approach to non-financial reporting.

The year 2020 will thus be a pivotal year in the evolution of the NFRD, with, as a backdrop, the idea of standardising the reporting and developing a framework of standards for non-financial information. The CSSF intends to continue its endeavours to improve the non-financial information presented by the issuers and to contribute, at its level, to the discussion on the revision of the NFRD. Its involvement will take the form of direct actions or active participation in international groups and will notably include:

- the contribution, within national and European bodies, to the public consultation launched by the European Commission on 20 February 2020 in the context of the revision of the NFRD in order to collect the views of the stakeholders before possible revisions;
- the participation in multilateral meetings with data providers and ESG-specialised rating agencies, but also with investor associations and other market players or think tanks;
- continuous training, exchange of good practices and submission of cases for discussion with other supervisory authorities in charge of enforcing non-financial information;
- thematic review of non-financial information and communication of relevant information to issuers and the public.

3. Work relating to MiFID II/MiFIR in the context of supervision of securities markets

3.1. Order and transaction data flows

The main purpose of market supervision is to prevent and detect abnormal behaviour that is likely to constitute market abuse or other infringements of financial and securities markets laws and regulations. For the supervision of the securities markets, the CSSF mainly relies on the reports of transactions in financial instruments which it receives on a daily basis from Luxembourg credit institutions and investment firms and from the other European financial institutions (via their national regulators). Since the entry into force of MiFID II/MiFIR on 3 January 2018, transaction reports on financial instruments received by the CSSF amount to approximately 1.8 million lines per month from Luxembourg credit institutions and investment firms (10 times more than under MiFID I) and 1.5 million lines from the other European regulators. Information from other sources, notably details of the orders placed on trading venues operated by the Société de la Bourse de Luxembourg, complete this data.

The extension of the scope of the data received and the substantial growth in its volume under MiFID II/MiFIR made it necessary to set up a new monitoring system allowing to process large volumes of data with limited staff. This new system notably integrates a platform (developed with an external service provider) to receive and process all the transaction reports, as well as a tool to ensure the monitoring of the quality of the data received and to trigger automatic alerts regarding potentially suspicious behaviours. The CSSF will continue to focus on the implementation of this new system, which will allow for more efficient supervision, while taking into account the challenges of large data volumes to be processed.

3.2. Data quality

To ensure efficient market supervision, it is also essential that the supervised entities transmit accurate and comprehensive transaction reports. Any error in a report is likely to trigger "false" alerts that must nevertheless be reviewed, with the result that the CSSF loses precious resources that could

have been dedicated to real alerts. Therefore, exchanges with Luxembourg entities concerning the quality of the transaction reports transmitted to the CSSF have been particularly intense in 2019 (i.e. more than 4,500 mails).

The CSSF will continue to invest a lot of time into monitoring the completeness and the quality of the transaction reports in 2020. To this end, it published in the beginning of 2020 the key messages communicated to the supervised entities during its campaigns to monitor the quality of transaction reports in 2018 and 2019 and announced several control campaigns to be carried out in 2020.

3.3. Qualification of virtual assets

The legal qualification by the actors concerned of the different virtual assets taking into account their characteristics is a major challenge and raises many questions with regard to the applicable laws and regulations governing securities markets, notably with regard to MiFID II/MiFIR. Indeed, these texts determine the scope of the notion of financial instrument which is a key notion to assess whether the European regulatory framework applies to services in relation to virtual assets.

4. Administrative arrangement for the transfer of personal data between EEA financial supervisory authorities and non-EEA financial supervisory authorities

Given the international dimension of financial markets in general and the Luxembourg financial centre in particular, cooperation and exchange of information with foreign authorities traditionally play an important role within the CSSF when applying and enforcing regulations governing securities and derivatives. This cooperation between competent administrative authorities usually takes place under the IOSCO Multilateral Memorandum of Understanding concerning consultation and cooperation and the exchange of information, in compliance and within the limits set by the laws in force in the various countries. To date, this Multilateral Memorandum has been signed by 120 authorities.

In this perspective, it was crucial to regulate certain aspects related to the application of the general data protection regulation (GDPR), applicable in EEA Member States since May 2018, in the area of international cooperation between financial sector supervisory authorities. A significant milestone was achieved on 12 February 2019 with the validation by the European Data Protection Board of the Administrative Arrangement for the transfer of personal data drafted by IOSCO and ESMA. This arrangement provides for appropriate safeguards and effective and enforceable rights for data subjects as regards the transfer of personal data to a recipient in a non-EEA country. The CSSF signed the administrative arrangement in August 2019 following approval by the National Commission for Data Protection (CNPD).

5. Market abuse

5.1. Requests for assistance

In 2019, the CSSF processed 72 requests for assistance from foreign authorities (64 in 2018). Most of the requests were from the British, French and Hungarian authorities, followed by the German, Spanish, Italian and US authorities. More than half of the requests for assistance were made in relation to investigations of insider dealing, mainly regarding orders or transactions in financial instruments made shortly before the announcement of information having a significant effect on the price of the financial instruments concerned, or, as regards derivatives, on the price of the underlying financial instruments.

The other requests for assistance were mostly related either to investigations in relation with market manipulation, or to the review of the compliance with the regulatory requirements governing customer protection (such as the rules governing the marketing to retail customers of highly speculative investment products such as contracts for difference or binary options), respectively the protection of customer assets and notably the rules to be observed by the banks and investment firms as regards the administration of accounts on which customer financial instruments or funds are deposited.

5.2. Detection and notification of transactions that may constitute market abuse

In 2019, the CSSF received 40 suspicious transaction reports under Article 16(2) of the Market Abuse Regulation⁷ from professionals established in Luxembourg (47 in 2018). This article requires banks and other professionals that arrange or execute transactions in financial instruments to detect and notify any order or transaction for which they have reasonable grounds to suspect that it may constitute insider dealing, market manipulation or attempted insider dealing or market manipulation8. The large majority of the reports notified to the CSSF in 2019 were from banks, although the circle of professionals referred to in Article 16(2) of the Market Abuse Regulation is, in principle, larger and includes other entities supervised by the CSSF and, where applicable, also entities that are not supervised by the CSSF. Almost 75% of the respective reports were related to suspicions of insider dealing in relation to transactions in shares, mostly admitted to trading or traded on a trading venue abroad and not in Luxembourg.

In addition, the CSSF received 32 suspicious transaction reports via its European counterparts under the cooperation established by Article 16(4) of the Market Abuse Regulation (26 in 2018). Almost all of these reports related to debt securities. Around a third of these reports concerned suspicions of market manipulations while the other ones concerned suspicions of insider dealings. The links between the suspicious transactions and the Luxembourg financial centre are often very light, which may be explained by the fact that debt securities are traded in a very decentralised manner. The CSSF opened investigations where appropriate.

Finally, it should be noted that besides suspicious transaction reports that the professionals are required to notify under Article 16(2) of the Market Abuse Regulation, the CSSF also receives alerts from the public which are often very useful.

5.3. Supervision of the detection and notification of transactions that may constitute market abuse

Given the importance of the detection and notification by professionals of transactions that may constitute market abuse for the authorities responsible for the supervision of financial markets, the CSSF strengthened its supervisory activities in order to ensure that the Luxembourg professionals subject to Article 16(2) of the Market Abuse Regulation comply with their obligations in this respect. Thus, in individual cases, the CSSF undertook on-site inspections to verify the compliance with these obligations and the technical standards provided for by the related delegated regulation9. The CSSF also started a thematic supervision with a larger sample of Luxembourg banks and investment firms to recall the technical standards applicable in this field and to measure the level of compliance therewith. In 2020, the CSSF will continue to supervise compliance of the professionals established in Luxembourg with their obligations regarding the detection and notification of orders or transactions that may constitute market abuse, notably with respect to fund managers.

5.4. Revision of the Market Abuse Regulation and its extension following the forex and cum/ex scandals

Work to review the Market Abuse Regulation at European level started in 2019. ESMA thus launched a public consultation in the autumn of 2019 before submitting its report on the application of the regulation to the European Commission. In line with the mandate that the European Commission had conferred on ESMA, the public consultation covered various subjects. Some of these subjects could have consequences beyond the traditional scope of market abuse. In particular, as a response to the forex and cum/ex scandals in certain Member States, the public consultation foresees an extension of the Market Abuse Regulation to the spot FX markets¹⁰ or the

⁷ Regulation (EU) No 596/2014 of 16 April 2014 on market abuse and repealing Directive 2003/6/EC and Directives 2003/124/EC, 2003/125/EC and 2004/72/EC.

⁸ Not to be confused with the suspicious activity reports or SARs under the AML/CFT legislation.

⁹ Commission Delegated Regulation (EU) 2016/957 of 9 March 2016 supplementing Regulation (EU) No 596/2014 with regard to regulatory technical standards for the appropriate arrangements, systems and procedures as well as notification templates to be used for preventing, detecting and reporting abusive practices or suspicious orders or transactions.

¹⁰ Please refer to "ESMA Consultation Paper on the MAR review report" (ESMA70-156-1459), page 11.

possibility for financial markets supervisory authorities to provide the tax authorities with information on transactions in financial instruments they receive under the MiFIR transaction reporting, or the creation of a standard aiming to sanction unfair behaviours that represent a threat to the integrity of financial markets beyond insider dealing and market manipulation. These proposals are likely to have major repercussions not only for the CSSF, but also for all the other stakeholders. However, it is still too early to foresee the outcome of these proposals, which should nonetheless become clearer as the work to review the Market Abuse Regulation as well as other relevant directives or regulations (such as MiFID II) progresses.

Chapter XIII 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 VII "Supervision of PFS".

1. Major events in 2019

1.1. Adaptation of supervisors' expectations and practices with respect to outsourcing

The need for an efficient and proportionate control of the ever-increasing outsourcing led to adaptations of supervisors' expectations and practices at several levels, including, in particular:

- the revision of Circular CSSF 17/654 on cloud computing, by introducing the principle of proportionality for non-material activities and by removing the need to notify cloud computing outsourcing of non-material activities in favour of maintaining a register;

at European level, the publication by the EBA of a substantially revised version of the "Guidelines on outsourcing arrangements" applicable since 30 September 2019.

1.2. IT (including cyber) risk

In a context of increasing digitalisation and interconnectedness and, whilst the national and SSM on-site inspections relating to IT risk brought weaknesses – sometimes significant – to light, prompting in many cases injunctions to act¹, the IT (including cyber) risk was naturally high on all agendas.

Consequently, the European Supervisory Authorities (EBA, ESMA and EIOPA) all worked to take greater account of the IT risks and to achieve greater convergence of the supervisory practices with respect to IT risks. The CSSF actively contributed to the work of the EBA and ESMA, as well as of the ECB (SSM), the main being:

- joint advice of the European Supervisory
 Authorities to the European Commission
 on the need for legislative improvements
 regarding requirements for the management
 of risks linked to information and
 communication technology (ICT) across
 the EU financial sector and on the need to
 consider the establishment of an oversight
 framework for monitoring critical IT service
 providers in the financial sector;
- publication of the "EBA Guidelines on ICT and security risk management," the first EU regulatory text dedicated to IT risk management entering into force on

¹ For further details, cf. points 1.11. and 2. of Chapter XVI "Instruments of supervision".

30 June 2020. The EBA Guidelines on security measures for operational and security risks for payment service providers were included in these new guidelines which hence cover all the entities falling within the remit of the EBA;

- preparation by ESMA of guidelines on outsourcing to cloud service providers;
- work of the European Supervisory Authorities on consumer protection in the context of artificial intelligence;
- work of the SSM which aims at further harmonising the IT supervision (tools, methodologies, training, etc.) and supplementing the general methodology of SSM's IT on-site inspections with two specific work programmes developed to carry out on-site inspection "campaigns" focussing, in 2019, on IT continuity and, in 2020, on cybersecurity.

1.3. Entry into force of PSD2 requirements relating to payment security and access to payment accounts

The regulatory technical standards (RTS) for strong customer authentication and common and secure open standards of communication entered into force in September 2019. Throughout 2019, the CSSF accompanied the market in its final preparation for the proper compliance with these standards. As regards card payments in the area of e-commerce, the CSSF contributed to the survey to know the state of preparedness of the European market for the RTS. It also examined over 40 requests for derogation from the contingency mechanism pursuant to Article 33(6) of the RTS and approved a little over half of them.

Finally, the CSSF continued to participate in the EBA's various committees and working groups relating to the RTS (Supervisory convergence workshops, Working Group on API, Q&A PSD2 network).

2. Challenges for 2020

2.1. Integration of European texts in the national supervisory framework

The CSSF must finalise the transposition of the EBA Guidelines on outsourcing and assesses, in particular, the possibility to centralise all the relevant rules in one single text. Furthermore, it is the opportunity to remove some outdated or repetitive passages from the current circulars and, thus, simplify the texts.

The CSSF must also integrate the EBA Guidelines on ICT and security risk management. It assesses the possibility to meet at the same time the requirements under the Law of 28 May 2019 transposing Directive (EU) 2016/1148 concerning measures for a high common level of security of network and information systems across the Union (commonly known as the "NIS Directive") by taking into account the synergies between the two texts.

These integrations represent significant changes which need to be presented to the market in order to ensure good understanding by the entities concerned.

2.2. Improvement of the IT supervisory process

In a context of strong IT dependence and a limited number of specialised resources, the CSSF continues its efforts towards a supervision based on a risk-based approach by relying on proportionate supervisory programmes and tools.

The CSSF agents in charge of supervising entities ("supervising agents") who are not IT risk specialists, already play a role in the supervision of IT risks when exercising their general supervisory work. However, considering the growing importance of these risks and the impact of digitalisation on business models, these agents will play an even greater role. In 2020, the team in charge of supervising information systems will continue to raise awareness of these supervising agents regarding general IT risks.

2.3. Monitoring of new technologies, models or solutions

In January 2020, the EBA published a report on Big Data and Advanced Analytics to which the CSSF contributed.

At international level, the Basel Committee on Banking Supervision created a sub-group in charge of identifying and assessing challenges in terms of risk management and supervision related to the use of artificial intelligence and machine learning in the financial sector. The CSSF participated in this sub-group and its work is in progress.

Moreover, at national level, the "DLT" working group, chaired by the CSSF and involving market participants, will continue its analysis of possible risks and issues regarding blockchain or DLT technology. The objective will be, in particular, to highlight elements to take into consideration in the due diligence process by a financial professional which contemplates to use such technology, irrespective of the applications concerned.

Models or solutions labelled "FinTech" or which are based on new technologies continue to develop on the market and the CSSF monitors the evolution of the technology in this area.

Supervision of information systems in practice

Supervision includes verifying that supervised entities comply with the legal and regulatory framework, focussing, in particular, on the technologies implemented as part of the information systems with a view to maintaining or improving the services offered. This implies taking into account the specific nature of the outsourcing of these 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 297 requests in 2019, i.e.:

• 58 applications for authorisation (IT-related part) for different types of entities (credit institutions, electronic money institutions, payment institutions, PFS);

• 239 requests for advice or for authorisation concerning 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)).

It should be noted that about 48% of the requests for advice or authorisation originated from credit institutions.

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 1.11. of Chapter XVI "Instruments of supervision".

Chapter XIV 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 allow ensuring that risks are managed in an efficient and lasting manner.

In 2019, the CSSF thus continued to carry out examinations in order to ensure compliance with the legal and regulatory requirements applicable to remuneration policies and practices. It also pursued its annual comparative evaluation exercise of the remuneration practices at national level. In this context, the CSSF noted a certain degree of stability in the remuneration practices: credit institutions distributed variable remunerations which amounted, on average, to 38% (against 37% in 2018) of the fixed component of the remuneration, the proportion of the variable remuneration paid out in financial instruments amounted to 35% on average (against 34% in 2018) and the deferred component of variable remuneration amounted to 26% (against 28% in 2018) of the granted variable remuneration.

Moreover, the CSSF continued receiving the notifications of higher remuneration ratios made by credit institutions and CRR investment firms in order to pay out a variable remuneration exceeding 100% of the fixed component. In this context, the CSSF ensures compliance with the notification procedure set out in Article 38-6(g) of the Law of 5 April 1993 on the financial sector and specified in Circular CSSF 15/622. In 2019, the CSSF found some improvements in the compliance with this procedure and it will continue to devote special attention to the analysis of notifications and

exceptional variable remuneration relating thereto. In this respect, the CSSF reiterates that granting such variable remuneration should allow a sound and effective risk management and cannot constitute an incentive to excessive risk-taking or to the sale of inadequate products.

Following the adoption of the new regulatory packages CRD V/CRR 2 - IFD/IFR and the new associated prudential regime for credit institutions and investment firms, the EBA has been tackling, since the second half of 2019, the task of updating and drafting guidelines and delegated regulations in the areas of remuneration and governance for the relevant entities.

Furthermore, in 2019, the CSSF collected, within the framework of a European exercise conducted by the EBA, information on the policy and practices of diversity with regard to the selection of members of the management body of CRR institutions, its objectives and any relevant targets set out in that policy, and the extent to which these objectives and targets have been achieved. The resulting report which provides a comparative overview with respect to diversity within the EU is available on the website of the EBA. The CSSF stresses, in this connection, the importance of evaluating the balance of knowledge, skills, diversity and experience of the management body. Appropriate diversity within the management bodies improves the decision-making processes, including those relating to strategy and risk-taking by facilitating an exchange of views, opinions, experiences, perceptions and values.



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

1.1. Development of the legal and regulatory framework

In April 2019, the CSSF adopted two CSSF regulations following the adoption of the Grand-ducal Regulation of 14 December 2018 determining the requirements for the professional qualification of *réviseurs d'entreprises* (statutory auditors) and *réviseurs d'entreprises agréés* (approved statutory auditors):

- CSSF Regulation No 19-03 relating to the establishment of a consultative commission;
- CSSF Regulation No 19-04 relating to the establishment of a list of diplomas and approvals.

Circular CSSF 19/717 replaced Circular CSSF 17/662 in order to reflect these developments.

The CSSF also published two FAQs concerning the interpretations of Regulation (EU) No 537/2014 on specific requirements regarding statutory audit of public-interest entities (PIEs) which deal with:

- the duration of the audit engagement (Article 17);
- the monitoring of the fee cap of non-audit services (Article 4(2)).

These FAQs were drawn up based on the guidelines adopted by the CEAOB (Committee of European Auditing Oversight Bodies).

1.2. Developments in audit standards

CSSF Regulation No 19-02 of 26 April 2019 introduced changes concerning mainly:

- the revised ISA 540 on auditing accounting estimates which applies to all financial years beginning on or after 15 December 2019;
- the code of ethics which was entirely reorganised;
- some amendments to these standards in order to comply with Regulation (EU) No 537/2014.

Circular CSSF 19/717 replaced Circular CSSF 17/662 in order to reflect these changes with respect to the parts "Application and Other explanatory material" and, where appropriate, the "Appendix" of the international standards on auditing.

1.3. Activities of the CEAOB (Committee of European Auditing Oversight Bodies)

In 2019, the CEAOB issued three comment letters addressed to the IAASB (International Auditing and Assurance Standards Board) regarding:

- the proposed strategy for 2020–2023 and work plan for 2020–2021;
- the consultation on the audit of less complex entities;
- the draft standards on quality management (ISQM1, ISQM2 and ISA 220).

In November 2019, the CEAOB also adopted guidelines concerning:

- · the duration of the audit engagement;
- the auditors' involvement on financial statements in the European Single Electronic Format (ESEF).

2. Quality assurance review

2.1. 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 (approved audit firms) 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 and other assignments entrusted exclusively to them by law is as follows (as at 31 December 2019):

- number of cabinets de révision agréés: 56, including 11 that audit PIEs;
- number of approved independent *réviseurs* (auditors): eight, none of whom audits PIEs.

Based on the data collected through the "Annual Annexes" for the year 2019, the audit engagements break down as follows between cabinets de révision agréés and independent réviseurs d'entreprises agréés:

- 82% of the audit engagements are carried out by the "Big 4";
- 10% of the audit engagements are carried out by medium-sized audit firms²;
- 8% of the audit engagements are carried out by the other audit firms and independent réviseurs.

2.2. Activity programme for 2019

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 was based on the information transmitted by firms and réviseurs through the "Annual Annexes" relating to their activity.

Under the 2019 programme, 15 firms were reviewed, six of which audit PIEs and nine 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 2019 (four reviewed files) and 2018 (or 2017, 2016, where appropriate);
- the setting-up of a specific follow-up for professionals for which material weaknesses were noted in the previous financial years.

The 15 reviewed audit firms reported³ a total of 9,436 audit engagements, including 460 in relation to PIEs. Under the 2019 review programme, 149 mandates were reviewed, 32 of which concerned PIEs.

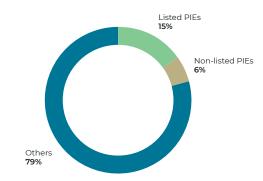
The quality assurance reviews started in January 2019 and were carried out by nine CSSF inspectors with professional audit experience and expert knowledge in the business areas of the financial centre. These reviews represented a total of 8,015 hours.

¹ PwC, KPMG, Deloitte, EY.

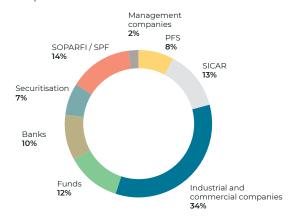
² Firms that carry out over 100 audit engagements (as at 31 December 2019, three firms are concerned).

³ Based on the statements of *cabinets de révision agréés* as at 31 December 2018.

Breakdown of audit files reviewed by the CSSF in 2019 per entity type



Breakdown of audit files reviewed by the CSSF in 2019 per sector



2.3. Conclusions of the 2019 campaign of quality assurance reviews

The 15 reviews carried out in 2019 were subject to an inspection report.

In particular, the CSSF carried out a specific follow-up of six réviseurs d'entreprises agréés due to previous campaign conclusions. The specific follow-up was maintained for two of them.

Five specific follow-ups were also decided during the 2019 campaign.

2.4. Major issues identified during the quality assurance reviews of 2019

Overall, the results of the 2019 quality assurance reviews were encouraging. They confirmed the trend observed these last years as regards the improvement of the quality of audits.

Nevertheless, some areas for improvement remain, particularly with respect to the "valuation" assertion for investments accounted for at fair value and with a certain degree of complexity. Thus, the CSSF expects further professional scepticism from *réviseurs* when verifying the reliability of the data used and when reviewing the significant assumptions used in the assessment models.

The réviseur shall also:

- ensure that the provisions of the International Private Equity and Venture Capital are complied with where they are used in the respective prospectus;
- ensure to lift the limitations included in the reports of the valuation expert;
- ensure the accurate breakdown of fair value between the different categories of financial instruments issued by the entity granting, where appropriate, different rights.

As regards the notes to the financial statements, the responsibility lies with the Board of Directors, the management or the Board of Managers. Nevertheless, the *réviseur* must identify false or missing information which is not insignificant and request the management to correct these anomalies. Increased attention is expected from auditors in order to substantially reduce the number of observations in this area during the upcoming quality assurance reviews.

As regards group audits, the critical review of the reports issued by the auditors on significant components is sometimes perfectible. This applies also to the so-called "referred" audits, i.e. where the audit is mostly carried out by another firm. In this context, the auditor must always ensure the appropriateness and sufficiency of the responses to significant risks and of the evidence collected in this respect by the firm carrying out a substantial part of the audit.

Finally, the CSSF would like to reiterate that the audit documentation must provide elements supporting the conclusions of the auditor and evidence that the audit has been planned and carried out in accordance with the ISA standards and with the applicable legal and regulatory requirements. The important professional judgements exercised during

the audit must be adequately documented in the auditor's files, as well as the facts and circumstances of the engagement and the supporting evidence.

Overview of the population of réviseurs d'entreprises in Luxembourg

3.1. Access to the profession

3.1.1. 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.

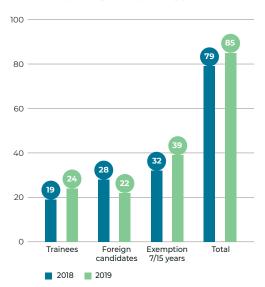
The commission met seven times in 2019 and analysed the files of 85 candidates, against 79 in 2018, representing an 8% increase.

In 2019, the access to training was refused to seven candidates (8%) 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



74% of the candidates come from the "Big 4". As regards the nationality, most of the candidates come from France (42%), followed by Germany (13%) and then Belgium and Luxembourg each with 11%. The remaining 23% originate from various other countries.

3.1.2. Examination of professional competence in 2019

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

In this context, the CSSF granted, based on the decision of the examination jury, the title of "réviseur d'entreprises (statutory auditor)" to 19 out of the 44 candidates registered for the written and oral exams of the examination of professional competence.

The graduation ceremony was held on 13 January 2020 in the presence of the Minister of Finance Mr Pierre Gramegna.



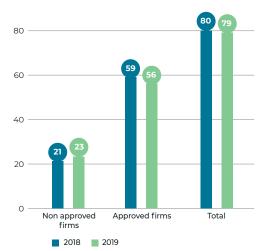
3.2. Public register

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).

3.2.1. National population as at 31 December 2019

 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 79 as at 31 December 2019, against 80 as at 31 December 2018.



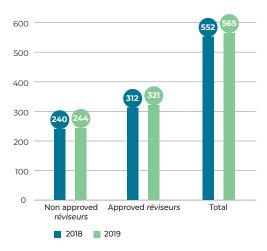
The following firm was approved in 2019:

· ACF AUDIT Luxembourg S.A.

In 2019, four firms gave up their title of "cabinet de révision (audit firm)" and their approval.

 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 565 as at 31 December 2019, against 552 as at 31 December 2018.



In 2019, the CSSF granted the title of "réviseur d'entreprises (statutory auditor)" to 35 people and approved 32 réviseurs d'entreprises.

During the year under review, 23 *réviseurs d'entreprises* gave up their title.

The population consists of 68% men and 32% women. The average age of the *réviseurs* is 43.64 years for women and 46.37 years for men.

Development in the number of trainee réviseurs d'entreprises

The total number of trainee *réviseurs d'entreprises* amounted to 65 as at 31 December 2019, against 85 as at 31 December 2018, which represents a 31% decrease.

The population consists of 63% men and 37% women. The average age of trainees is 28.95 years for women and 29.61 years for men.

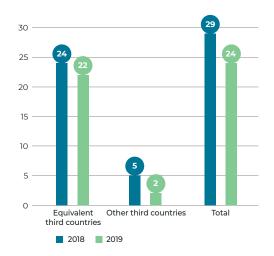
It should be pointed out that 78% of the population of trainees comes from the "Big 4" firms.

3.2.2. 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 five entities in 2019. These entities did not renew their registration with the CSSF, as their activities no longer fell within 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



4. Cooperation agreements

The CSSF did not sign any new cooperation agreement in 2019. The agreements previously concluded are available on the CSSF website.



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 and financial market participants. Moreover, the OSI department coordinates on-site inspections of Luxembourg significant banks with the "Centralised On-site" inspection department of the ECB. It should be noted that, beside the OSI department, other CSSF departments also carry out targeted on-site inspections.

In addition to on-site inspections of professionals under Luxembourg law, the OSI department also participated, in the context of the mixed teams/cross-border missions concept implemented by the ECB, in four on-site inspections of European significant banks abroad. i.e. in France, the Netherlands and Italy.

The OSI department's staff strengthened to 80 people as at 31 December 2019 in order to fulfil all its tasks.

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, the on-site inspections are proposed, on an annual basis, by the supervisory departments which have developed a risk-based approach 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.

The teams in charge of on-site inspections² are set up according to the nature, scale and scope of the missions and generally include agents from the OSI department and the off-site supervisory departments.

After each on-site inspection, the team in charge draws up an internal report on the controls performed and on any weakness identified during the on-site inspection. The observations are then shared with the professionals during a fact validation meeting. Generally, on-site inspections are followed by an observation letter that is sent to the inspected professional. 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 sanctions and means of administrative police are described in detail in point 2. of this chapter.

¹ This includes less significant banks which are not subject to the SSM as well as "AML/CFT", "MiFID", "Depositary bank" and "Central administration function" 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.

Since the entry into force of Grand-ducal Regulation of 21 December 2017 relating to the fees to be levied by the CSSF, a lump sum is billed for every on-site inspection relating to a specific topic. This lump sum amounts to EUR 25,000 for banks and EUR 10,000 for the other entities.

In 2019, 136 on-site inspections were conducted by the CSSF departments or with their participation. Thirty-nine of these missions were performed by the UCI departments and are set out in point 5.5. of Chapter IX "Supervision of investment fund managers and UCIs". Three on-site inspections were performed by the "Banking Supervision" department and are described in point 1.12. of Chapter VI "Supervision of banks". The other 94 missions concerned the following topics.

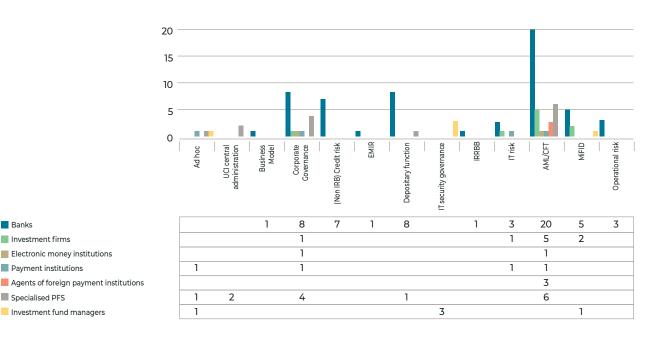
Banks

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. In principle, 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 on-site inspections may vary significantly and, consequently, determine the composition and size of the on-site teams.

In 2019, three ad hoc on-site inspections were performed. In addition, several ad hoc missions that had been initiated in 2018 continued through 2019. They concerned, in particular, governance and AML/CFT.

Breakdown of the on-site inspections carried out in 2019 by topic and type of entity (excluding UCI departments and the "Banking Supervision" department)



1.2. "Interest rate risk" on-site inspections

"Interest rate risk" or "Interest rate risk in the banking book (IRRBB)" on-site inspections aim to assess how interest rate risk arising from non-trading activities is managed and to assess the stress test results. They are performed based on the methodology covering the interest rate risk prepared by the ECB.

In 2019, the CSSF carried out one IRRBB mission, which revealed that interest rate risk management had not yet been taken into account adequately, notably with respect to the implementation of the EBA requirements.

1.3. "Operational risk" on-site inspections

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

In 2019, the CSSF carried out three such missions, two of them at significant banks in the framework of the SSM. One of these missions, which concerned a significant bank abroad, related to management of outsourcing.

As regards operational risk as such, the CSSF detected weaknesses relating to the capture of low-frequency, high-severity risks, as well as to the management and monitoring of operational incidents.

As far as outsourcing is concerned, the CSSF identified a certain number of shortcomings regarding the initial assessment of outsourced projects and the establishment of contracts. Moreover, monitoring of outsourcing lacked rigour, both in terms of relevance and risk indicator analysis, and in terms of monitoring of operational risks linked to the outsourcing.

It should be noted that the CSSF participated in the ECB working group whose purpose was to update the control methodology in accordance with the new EBA guidelines applicable since 2019.

1.4. "Credit risk" on-site inspections

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

This credit risk-related on-site methodology changed in 2019 as it incorporated in detail the IFRS 9 principles, notably as regards:

- staging linked to the perception of significant increase in credit risk and its coexistence with prudential classifications (forborne, NPE);
- calculation of expected credit losses, on an individual or collective basis, consistent with the risk level (staging);
- incorporation of forward-looking elements in the calculation of expected credit losses.

In 2019, the CSSF contributed to missions at two significant banks abroad as part of the commercial real estate and trade financing campaigns.

The CSSF also performed credit risk missions at five banks in Luxembourg. These missions concerned various subjects such as mortgages, corporate banking loans and credits linked to credit cards.

As regards identified weaknesses, the CSSF noted that where credit management activities were outsourced, the local bank did not necessarily maintain control of the process, be it at the level of credit acceptance or monitoring. The CSSF reminds that it is essential for the bank to have an overview, at all times, of the credit risk while ensuring local involvement when the credit is granted, but also throughout the life of the credit.

Moreover, where the bank's organisation is based on significant credit risk mitigation by the parent undertaking or third parties, it appeared that credit granting and credit risk monitoring were based exclusively on the guarantee provided by third parties without taking into account the credit risk assessment of the borrower.

Furthermore, the Risk Appetite Statement was often incomplete and breaches were not

monitored or did not trigger actions from the management.

Finally, as regards IFRS 9, weaknesses were identified in relation to model governance, timely recognition of days past due and parameters to determine expected credit losses on a collective basis and disclosure requirements.

1.5. "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 XIX "Financial crime" which relates more particularly to the CSSF's supervision with respect to AML/CFT.

1.6. "Corporate governance" on-site inspections

"Corporate governance" on-site inspections aim to assess the quality of the governance arrangements set up by the professionals pursuant to the legal and regulatory requirements. The internal governance arrangements overall, the "group head" function exercised by a Luxembourg entity over its subsidiaries and/or branches, the organisation and efficiency of the internal control functions of an entity, as well as the remuneration policies may thus be subject to such an inspection.

In 2019, 16 "Corporate governance" on-site inspections were carried out at credit institutions, whether supervised by the CSSF or directly by the ECB, as well as at investment firms, electronic money institutions, payment institutions and specialised PFS. One member of the OSI department contributed to a mission regarding the risk control function of a significant bank abroad.

Beside controls regarding the functioning of the Board of Directors, authorised management, their committees and internal control functions as well as their collaboration, on-site inspections focussed on the risk control function and compliance with the regulatory requirements relating to European market infrastructures (EMIR) in 2019.

The major weaknesses, by recurrence or seriousness, that were observed in

2019 within Boards of Directors and their specialised committees, mainly concerned the responsibility they are required to take under the regulations, be it in terms of strategy, functioning, internal governance control or formalisation of their decisions.

As regards the authorised management and management committees, the main deficiencies concerned the accountability regarding supervision of internal control functions, real involvement of *dirigeants* in the daily management of the entity or effective task segregation.

Deficiencies relating to the sound management of outsourcing, notably as regards the control over and monitoring of externalised activities were also identified.

The results of on-site inspections relating to the second line of defence revealed deficiencies with respect to the management of known and potential conflicts of interest at the level of Boards of Directors, authorised management as well as control functions, whose independence can, in certain cases, be affected by conflicts of interest. In addition, the compliance function had not systematically established a control plan according to a risk-based approach and documented the performed controls.

As regards the risk control function, the CSSF noted a lack of involvement of this function in making important decisions or a lack of clear definition of its responsibilities within the supervised entities, which may weaken its authority as well as risk management as a whole. The CSSF also noted a lack of risk management strategy, system of limits and risk control plan in certain inspected entities, as well as deficiencies regarding the communication of identified weaknesses by the risk control function and regarding the definition of risk appetite indicators.

As for the internal audit function, the CSSF found internal audit plans that were incomplete or established without taking into account a risked-based approach.

Finally, several on-site inspections revealed that certain weaknesses identified by the CSSF or by the internal audit function had not been followed up.

In the framework of "Corporate governance" on-site inspections, the CSSF carried out one inspection to assess the compliance of a credit institution with the requirements of EMIR which aims at improving transparency and reducing the risks linked to derivatives markets.

As regards the organisational framework with respect to compliance with EMIR, the main weaknesses related to internal governance regarding the reporting of the information required by the regulations to the authorised management, the formalisation of decision-making, but also the framework and quality of oversight of the outsourcing of certain EMIR-related activities. As far as risk mitigation techniques are concerned, weaknesses have been detected with respect to timelines for confirmation of OTC contracts transactions. The EMIR reporting process set up by the entity also revealed deficiencies, which affected the quality of the information to be communicated to the competent authorities.

1.7. "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 the business strategy of an institution and its risk strategy are linked while observing its medium— and 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 2019, the CSSF carried out this type of mission at one credit institution. This mission allowed identifying weaknesses as regards the process to define and review the entity's strategy, leading to lack of formalisation which is, however, required, and dissemination of inconsistent information within the entity and the group.

The definition of the methodology regarding risk pricing policy and its implementation also revealed weaknesses. Furthermore, the lack of

available reliable data and lack of profitability analysis entailed that the entity was unable to quantify the influence of the pricing strategy on the decrease of net commission income.

In addition, the financial planning of the entity only relied on a hypothesis without taking into account alternative scenarios or developments that are potentially negative for the entity's profitability. Also, the entity did not make any ex-post verification of the performances of its financial planning exercises.

1.8. "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.

In 2019, the CSSF carried out eight "MiFID" on-site inspections at credit institutions, investment firms and management companies authorised under Chapter 15 of the Law of 17 December 2010 relating to UCIs.

The weaknesses identified mainly concerned the same subjects as in the previous years, namely the lack of formalisation of the assessment of suitability/appropriateness, incomplete identification of certain conflicts of interest and shortcomings in the controls performed by the internal control functions. Deficiencies were also observed concerning the information communicated to clients and, in particular, the information relating to costs and expenses and to reports of losses exceeding 10%.

During these on-site inspections, the CSSF covered the obligations relating to "product governance", which are one of the major changes introduced by MiFID II with respect to investor protection. The CSSF wishes to stress the importance of these obligations in order to avoid any distribution of products that are inconsistent with the needs, characteristics and objectives based on which they have been conceived. In this context, the CSSF refers to the ESMA Guidelines on MiFID II product governance requirements (ESMA35-43-620) which further clarify these obligations.

Through the obligations it lays down, MiFID II establishes a connection between the two main

links of the distribution chain, i.e. between manufacturing and distribution of financial instruments. Thus, for every financial instrument, manufacturers are required to define ex-ante a "potential" target market of clients (whose needs, characteristics and objectives are compatible with the product), as well as a specific distribution strategy for every financial instrument that suits the defined target market. They are bound by other obligations as well, such as the obligation to perform a scenario analysis of their financial instrument and to determine whether the financial instrument meets the identified needs, characteristics and objectives of the target market, including an examination whether the "risk/remuneration" profile of the financial instrument is compatible with the target market.

Distributors, however, are required to gather information on the target market and the appropriate distribution channels of manufacturers and to analyse this information with a critical look, in order to refine the target market ("real" target market for the specific product) and the proposed distribution strategy. The distributors are in charge of ensuring that the distribution of the financial instrument takes place within the target market and the previously defined distribution strategy. Distributors have other obligations such as regularly reviewing and updating their product governance arrangements and providing information on sales to the manufacturers and, where applicable, on the reviews referred to above in support of the reviews of the products by the manufacturers. Manufacturers and distributors of financial instruments must ensure that their Compliance function supervises the establishment and periodic review of the product governance arrangements and that the management body performs efficient control over the product governance process.

The most significant weaknesses regarding MiFID product governance that were identified during the on-site inspections in 2018 and 2019 are the following:

 Lack of understanding by certain supervised entities regarding the scope of application of the obligations in their capacity as manufacturers and/or distributors. The CSSF reminds that a firm that manufactures

- a financial instrument, including the creation, development, issuance or design of that instrument, is considered as being a manufacturer within the meaning of MiFID II. A firm that offers, recommends or sells a financial instrument and a service to a client, is considered as being a distributor within the meaning of MiFID II.
- Lack of arrangements within supervised entities in order to allow ensuring that the distributed products are compatible with the target markets and the distribution strategies that have been defined ex-ante.
- Substitution of all or part of the product governance requirements by an assessment of the suitability and appropriateness (e.g. suitability test used to comply with the tests relating to various criteria of the target market).
- Systematic use by the distributors, without ex-ante analysis, of the target market and distribution strategy proposed by the manufacturer. The CSSF stresses that the distributors' obligations are an essential aspect of the MiFID II product governance, as it is the last step before distribution of the product to the client. In this regard, the distributor may not systematically adopt the target market and the distribution strategy defined by the manufacturer. Indeed, the distributor must review the information transmitted by the manufacturer with a critical look.
- Absence of regular and periodic review of the product governance arrangements by the manufacturer and the distributor of financial instruments in order to assess whether the products and services are reaching the target market.
- Lack of transmission of information from distributors to manufacturers, whether or not the latter are subject to the MiFID II product governance requirements.

1.9. "Depositary" on-site inspections

In 2019, the CSSF conducted nine on-site inspections regarding the "Depositary" function: eight at banks and one at a 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 custody of the different types of assets, the due diligence processes with respect to the different types of parties involved in the safekeeping of assets and the management of UCIs, the process of acceptance of new assignments, the follow-up of the delegated activities as well as the specific oversight duties.

The CSSF identified a few significant weaknesses as regards ownership verification for the other assets which had not yet been carried out rigorously and systematically for all types of other assets.

Weaknesses in the monitoring process for UCI cash flows as well as other specific supervisory obligations were also identified. Indeed, depositaries are required to define ex-post supervisory procedures that suit the characteristics of the different funds and their investments. However, they must also take into account the quality of the controls carried out and of the processes in place within funds and their providers.

Moreover, the management of conflicts of interest as well as the supervision of the delegates in charge of asset safekeeping remain weaknesses that are regularly observed during on-site inspections.

It must also be noted that in the future, emphasis will be placed on the delegation of supporting tasks linked to cash flows and to other specific oversight obligations, given that ESMA has specified the acceptability criteria in Questions and Answers published in June 2019. Consequently, these tasks can only be delegated where three conditions are met: (i) their execution may not involve any discretionary judgement or interpretation by the third party in relation to the depositary function; (ii) the execution of the tasks does not require specific expertise in regard to the depositary function and (iii) the tasks are standardised and pre-defined.

1.10. "UCI central administration" on-site inspections

In 2019, the CSSF carried out two "UCI central administration" on-site inspections at the premises of two specialised PFS.

These on-site inspections mainly covered the NAV calculation process, the transfer agent function, the processes of acceptance of new assignments, the procedures in place, the human and technical means available as well as the supervision of the delegated operational activities.

The recurrent weaknesses that the inspections revealed concerned the formalisation and documentation of procedures and controls performed by the entity.

Moreover, the lack of involvement, coordination and follow-up of the central administration where operational processes related to NAV calculation are being outsourced to other providers, remained a major issue. The central administration may not discharge itself of liability and must therefore have sound processes in place in order to be able to validate the NAV.

1.11. "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 2019, this team performed six inspections, one at a bank, one at an investment firm, one at a payment institution and three at management companies. It also performed two on-site inspections at Luxembourg significant banks in the framework of the SSM. Finally, it cooperated with other CSSF teams in "Governance", "Operational risk" and "AML/CFT" on-site inspections at two management companies, one payment institution and one Luxembourg significant bank.

The main shortcomings, in terms of frequency or seriousness, identified in 2019 during the "IT risk" on-site inspections concerned:

 IT governance, in particular the lack of IT strategy, weak monitoring of IT activities and insufficient policies and procedures;

- IT security, including the management of cyber threats, in particular the control of privileged access as well as the mitigation of the critical vulnerabilities;
- the weak security and control environment of the new IT development practices (such as Agile, DevOps);
- the management of IT risks, with a very weak or even lack of risk coverage by the second line of defence;
- internal audit, notably the weak or even lack of coverage of IT activities as well as independence and competence issues to assess related risks;
- continuity of activities as a whole (governance, plans and tests);
- outsourcing, in particular the contractual aspects and operational monitoring, often due to overconfidence in parent undertakings.

2. Decisions as regards sanctions and administrative police taken in 2019

In 2019, the CSSF took the following decisions with respect to sanctions and administrative police. The total amount of administrative fines imposed in 2019 amounted to EUR 2,186,983.

2.1. Credit institutions

In 2019, the CSSF imposed six administrative fines on credit institutions pursuant to Articles 63 and 63-2 of the Law of 5 April 1993 on the financial sector, Article 148 of the Law of 17 December 2010 relating to UCIs and Article 51 of the Law of 12 July 2013 on alternative investment fund managers.

Two fines, amounting to EUR 250,000 and EUR 15,000, respectively, were imposed for non-compliance with the AML/CFT professional obligations. Another fine, amounting to EUR 158,900, was imposed due to shortcomings in relation to the depositary bank function. One bank had to pay a fine of EUR 40,000 for non-compliance with the professional obligations under MiFID. Two fines, amounting to EUR 120,000 and EUR 150,000 respectively, were imposed on

two credit institutions for shortcomings with respect to internal governance.

2.2. Investment firms

In 2019, the CSSF imposed five administrative fines pursuant to Article 63 of the Law of 5 April 1993 on the financial sector. These fines were imposed on investment firms as legal persons.

Two investment firms had to pay fines of EUR 15,000 each for non-compliance with professional obligations regarding capital ratio and for the appointment of two key function holders without prior CSSF authorisation. Moreover, the CSSF imposed two fines on an investment firm for non-compliance with certain professional obligations under MiFID regulations (EUR 56,250) and for non-compliance with certain professional obligations as regards AML/CFT (EUR 27,000). The CSSF imposed a EUR 50,000 fine on another investment firm for non-compliance with several professional obligations relating to the establishment of a solid central administration and a sound and prudent business management, as well as to certain internal governance provisions.

Furthermore, two fines totalling EUR 203,568 were imposed on an investment firm under Article 12 of the Law of 12 December 2016 on market abuse (c.f. point 2.8. below).

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

- shortcomings in relation to AML/CFT arrangements in place;
- shortcomings in relation to MiFID II-related legal and regulatory provisions;
- high number of weaknesses identified by the external auditor and by the internal auditor as regards the closing documents for the financial year 2017;
- failure to regularise the recurrent recommendations issued by the external auditor and the internal auditor within the time limits imposed by the CSSF;
- non-compliance with regulatory provisions relating to IT control environment.

In 2019, the CSSF decided to temporarily withdraw the professional repute of three natural persons for the following reasons:

- criminal record of the person concerned in relation to his/her activity as former director and shareholder of a former Luxembourg investment firm;
- communication of incomplete, incorrect or false information to the CSSF or lack of communication of information to the CSSF by the person concerned in the framework of his/her function as former managing director and direct majority shareholder of a former Luxembourg investment firm;
- declaration of honour communicated by the person concerned in the framework of the application for authorisation as investment firm was found to be inaccurate.

In 2019, the CSSF transmitted a report to the State Prosecutor pursuant to Article 23(2) of the Code of Criminal Procedure and two reports pursuant to Article 74-2(4)2° of the Law of 7 March 1980 on judicial organisation.

In 2019, the CSSF filed 45 complaints with the State Prosecutor regarding entities which claimed to be established in Luxembourg and offering investment services without authorisation. The rise in the number of complaints compared to 2018 can be mainly explained by the emergence of fake websites meant to mislead potential investors.

2.3. Specialised PFS

Pursuant to the provisions of Article 63 of the Law of 5 April 1993 on the financial sector, the CSSF imposed three administrative fines, amounting to EUR 100,000, EUR 42,000 and EUR 36,500 respectively, for the following reasons:

- deficiencies observed during an on-site inspection regarding central administration;
- non-compliance with the professional obligations regarding AML/CFT arrangements;
- non-compliance with the professional obligations regarding internal governance.

The CSSF used its right of injunction in accordance with Article 59 of the aforementioned law on seven occasions based on the following:

- failure to submit the AML/CFT questionnaire in a timely manner;
- poor day-to-day management;
- deficiencies observed during a "Corporate governance" on-site inspection;
- non-compliance with the legal obligations governing change of indirect shareholding;
- delays in filing annual accounts of domiciled companies.

Moreover, the CSSF addressed a call to order to a specialised PFS for non-compliance with professional obligations governing the establishment of a subsidiary.

2.4. Support PFS

According to Article 63 of the Law of 5 April 1993 on the financial sector, the CSSF imposed an administrative fine on two support PFS in 2019, amounting to EUR 16,875 and EUR 15,000, respectively, due to non-compliance with the prudential obligations relating to administrative and accounting organisation for the closure of 2018 and for the closures of 2017 and 2018, respectively.

2.5. Payment institutions

In 2019, a payment institution was the object of a prudential measure of temporary suspension of the provision of all its payment services due to non-compliance with the major legal requirements governing the protection of the funds of payment service users. Also, a payment institution was fined for having breached the rules governing the disclosure of accounting balance sheets and situations.

2.6. Investment fund managers (IFMs)³

In accordance with the provisions of Article 148(4)(e) of the Law of 17 December 2010 relating to UCIs, the CSSF imposed an administrative fine amounting to EUR 80,000 on an IFM. This fine was imposed following an on-site inspection at the IFM, which revealed certain occasional breaches of the legal provisions governing

³ 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.

the general requirements for procedures and organisation, of the organisation of the internal audit function, the conditions regarding authorisation to delegate, the establishment and monitoring of a best execution policy as well as AML/CFT arrangements.

Pursuant to the same article, the CSSF issued an administrative fine of EUR 10,000 against another IFM for occasional breaches of the legal provisions relating to due diligence requirements in terms of selection and ongoing monitoring of an investment for the account of two sub-funds of a UCITS, to the requirement to guarantee the use of price formation models and fair, correct and transparent valuation systems for this UCITS and to ensure that senior management receives, on a regular basis, reports on the implementation of investment strategies of this UCITS.

Moreover, in accordance with the provisions of Article 148(4)(e) of the Law of 17 December 2010 relating to UCIs and Article 51(2) of the Law of 12 July 2013 on alternative investment fund managers, the CSSF imposed an administrative fine of EUR 23,000 on an IFM. This fine was imposed following an on-site inspection at the IFM which revealed certain occasional breaches (i) of the provisions of the Law of 17 December 2010 governing the general requirements for procedures and organisation, the organisation of the permanent compliance function, and the establishment and monitoring of a best execution policy, and (ii) of the provisions of the Law of 12 July 2013 relating to the investment management function and the risk management function.

In accordance with the provisions of Article 8-4(4) of the Law of 12 November 2004 on the fight against money laundering and terrorist financing, the CSSF imposed administrative fines of EUR 10,000 each on 12 registered AIFMs for non-compliance with their regulatory AML/CFT obligations.

Finally, pursuant to the provisions of Article 3(3) of the Law of 15 March 2016 on OTC derivatives, central counterparties and trade repositories, the CSSF issued administrative fines of EUR 2,000 each on seven registered AIFMs under the provisions of Article 3(1)4(b) of this law.

In 2019, the CSSF decided to withdraw two IFMs from the official list for non-compliance with the legal provisions.

2.7. Undertakings for collective investment⁴

In accordance with Article 51(1) of the Law of 13 February 2007 relating to specialised investment funds (SIFs), the CSSF imposed administrative fines amounting to EUR 2,000 or EUR 4,000, as the case may be, on the *dirigeants* of 20 SIFs for non-filing of the annual financial report and on the *dirigeants* of 22 SIFs for non-filing of the management letter. Based on the same legal provisions, the CSSF imposed administrative fines of EUR 2,000 each on the *dirigeants* of a SIF for failing to transmit the required information and documents.

In accordance with Article 17(1) of the Law of 5 June 2004 relating to the investment company in risk capital, the CSSF imposed administrative fines amounting to EUR 500 each on the *dirigeants* of five SICARs for non-filing of the annual financial report and on the *dirigeants* of five SICARs for non-filing of the management letter.

In accordance with the provisions of Article 8-4(4) of the Law of 12 November 2004 on the fight against money laundering and terrorist financing, the CSSF imposed administrative fines of EUR 10,000 each on two SIFs for non-compliance with their regulatory AML/CFT obligations.

Moreover, the CSSF imposed an administrative fine of EUR 500 on a natural person for filing an incomplete declaration of honour.

Finally, the CSSF refused to authorise a natural person as a director of a UCITS pursuant to the provisions of Article 129(5) of the Law of 17 December 2010 relating to UCIs.

In 2019, the CSSF decided to withdraw three UCITS, eleven SIFs and one SICAR from the official lists for non-compliance with the legal provisions.

⁴ 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

2.8. Securities markets

In the framework of the control of advertisements and documents accessible to the public following the approval of a prospectus for securities by the CSSF, an administrative fine of EUR 10,000 was imposed on an issuer for irregularities observed in relation to different provisions of the Law of 10 July 2005 on prospectuses for securities.

The review of financial reports under the Transparency Law led the CSSF to issue three administrative fines, mainly due to delays in the disclosure and filing of annual financial reports. The total amount of these fines, imposed in accordance with Article 25 of the Transparency Law, was EUR 65,000. Moreover, the CSSF imposed an administrative fine of EUR 2,625 as regards the control of major holdings under the Transparency Law. Due to repeated and ongoing breaches of the Transparency Law, the CSSF decided to request the withdrawal of the shares of an issuer from trading on the regulated market of the Luxembourg Stock Exchange.

In 2019, the CSSF imposed two administrative fines on an investment firm under Article 12 of the Law of 23 December 2016 on market abuse (Market Abuse Law). The first fine was imposed for deficiencies noted, following an ad hoc on-site inspection, in the arrangements to detect and report market abuse that the persons professionally arranging or executing transactions must establish and maintain in accordance with Article 16(2) of the Market Abuse Regulation. The second fine was imposed as the checks performed during the on-site inspection revealed that the undertaking had knowingly provided incomplete information on essential elements to requests from the CSSF under the Market Abuse Law.

2.9. Audit profession

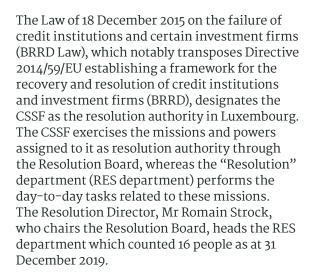
Pursuant to the provisions of point (e) of Article 43(1) of the Law of 23 July 2016 concerning the audit profession (Audit Law), the CSSF imposed an administrative fine of EUR 1,500 on a *cabinet de révision agréé* (approved audit firm). This fine was issued under the provisions of point (g) of Article 43(2) of the Audit Law for failure to publish the transparency report.

Pursuant to the provisions of point (f) of Article 43(1) of the Audit Law, the CSSF issued two administrative fines of EUR 1,500 each against two *réviseurs d'entreprises agréés* (approved statutory auditors). These fines were issued in accordance with the provisions of point (a) of Article 43(2) of the Audit Law for infringement of the legal and regulatory requirements relating to ongoing training.

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 administrative fines on réviseurs d'entreprises agréés amounting, as the case may be, to EUR 10,890, EUR 10,000, EUR 18,000, EUR 56,375, EUR 12,000 or EUR 45,000. These administrative fines were imposed based on the provisions of Article 40(2) and points (a) and (b) of Article 43(2) for professional misconduct and negligence which have led to the infringement of the legal and regulatory requirements relating to statutory audits.

Chapter XVII

Resolution



The Resolution Board met four times in 2019 and also took decisions by written procedure.

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 under the scope of the BRRD Law or Regulation (EU) No 806/2014 (the SRM Regulation), 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;
- writing-down or conversion of relevant capital instruments;
- execution of the instructions issued by the SRB.

Moreover, the RES department represents the CSSF as resolution authority within international fora, such as the SRB and the EBA.

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 purpose 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), 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 2019 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 Supervision" department 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 2019, the RES department participated in a resolution simulation exercise concerning a banking group established in three countries of the Banking Union. Two other national resolution authorities concerned as well as departments of the European Commission and the ECB also participated in this exercise organised by the SRB.

In a cross-border context outside the SRB, the RES department heads four resolution colleges (three colleges relating to banks for which the CSSF is the group-level resolution authority and one "European" college relating to sister banks in several EU Member States which are subsidiaries of a third-country entity). 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.

Resolution plans for the three colleges relating to banks for which the CSSF is the group-level resolution authority as well as several resolution plans for the aforementioned less significant banks have been adopted by the Resolution Board.

Two CSSF-CODERES circulars were published in 2019 concerning, on the one hand, the raising of 2019 contributions for the Single Resolution Fund and, on the other hand, the collection of information for the calculation by the SRB of the 2020 contributions to this fund.

Chapter XVIII 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) separated 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 CPDI is assisted in the performance of its duties by the "Depositor and Investor Protection" department (PDI department) of the CSSF which counts five agents. In general, the PDI department performs the operational tasks of the FGDL and of the SIIL.

· Activities of the CPDI

The CPDI met four times in 2019 with agendas which were largely determined by the measures to be taken in order to ensure that the framework for the protection and compensation of depositors and investors is operational and efficient in accordance with the legal provisions. Following the decisions of the CPDI, the CSSF signed a service contract with a printing company in order to print and envelop large amounts of mail addressed to depositors in case of failure of a Luxembourg credit institution. The CSSF also continued to invest in the development of a software to manage the reimbursement of covered deposits.

In accordance with Article 166 of the BRRD Law, the CPDI concluded a first cycle of stress tests pursuant to the EBA Guidelines (EBA/GL/2016/04) on stress tests of deposit guarantee schemes. In the context of the cooperation between the European deposit guarantee schemes provided for in Articles 183 and 193 of the BRRD Law, the CPDI decided to participate in the European DGS to DGS Information Exchange System (Eddies) implemented by the Prüfungsverband deutscher Banken GmbH, in accordance with the rules defined by the European Forum of Deposit Insurers (EFDI) and in compliance with the protection of personal data. This participation will greatly facilitate the management of bilateral relations between European deposit guarantee schemes. Finally, the CPDI continued to manage the reimbursement of depositors of ABLV Bank Luxembourg S.A. which was put into liquidation by the Luxembourg Tribunal d'arrondissement (District Court) on 2 July 2019.

· Activities of the PDI department

The PDI department pursued the examination of the files of depositors of ABLV Bank Luxembourg S.A. (in liquidation) who requested a reimbursement by the FGDL. Furthermore, the department continued enhancing the operational arrangements of the FGDL, notably by completing the first cycle of priority tests laid down in the EBA Guidelines (EBA/GL/2016/04). In 2019, the tests concerned the department's operational capability in relation to IT and direct mail. The PDI department also carried out on-site inspections at three FGDL member institutions in order to verify the quality of their arrangements for producing the so-called "Single Customer View" (SCV) file. The SCV file is a database that each member institution

must be able to deliver to the CPDI, in accordance with Article 169 of the BRRD Law, in case the deposits become unavailable.

The PDI department carried on with the negotiation of bilateral agreements with its European counterparts under the Guidelines EBA/GL/2016/02 on cooperation agreements between deposit guarantee schemes in order to resolve certain operational issues of cross-border reimbursement and transfers of contributions between the deposit guarantee schemes as provided for in Articles 183 and 189 of the BRRD Law. In parallel, it contributed to the work initiated by the EBA, the European Commission and the Council aiming at assessing and improving the efficiency of the deposit guarantee schemes.

Finally, the PDI department took further steps in order to provide the FGDL with a syndicated credit line allowing it to meet its commitments in case its financial means are insufficient.

Interventions

On 24 February 2018, the CSSF determined the unavailability of deposits at ABLV Bank Luxembourg S.A. (in liquidation). The reimbursement of depositors which started in March 2018 continued in 2019. Indeed, the FGDL reimburses the eligible depositors as they transmit, to the FGDL, the information necessary to carry out the reimbursement and once their eligibility is confirmed by the CPDI. It should be noted that the right of the depositors of ABLV Bank Luxembourg S.A. to request the reimbursement of their deposits by the FGDL ceases on 24 February 2028 if the deposits remain unavailable until that date, irrespective of the judicial winding-up of ABLV Bank Luxembourg S.A. ordered by the Luxembourg Tribunal d'arrondissement (District Court) on 2 July 2019.

No other intervention took place in 2019 either with respect to deposit guarantee or investor compensation.

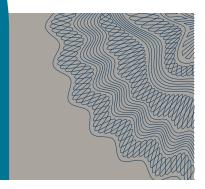
· Financing of the FGDL

At the end of 2019, the FGDL counted 99 member institutions. The methods for calculating the contributions to the FGDL remained unchanged. Given that in 2018, the FGDL reached, for the first time, the target level of 0.8% of covered deposits in accordance with Article 179(4) of the BRRD Law, the collection of EUR 13.5 million (against EUR 98.2 million in 2018) was sufficient in order to maintain the target level which increased due to the 4.5% growth in the covered deposits in 2018. The target level being reached, the condition to start collecting contributions for the buffer of additional financial means laid down in Article 180 of the BRRD Law was met. Thus, the FGDL collected the first of the eight tranches, i.e. EUR 31.8 million, so as to build up this buffer which must reach 0.8% of the covered deposits in 2026.

As at 31 December 2019, the available financial means of the FGDL in terms of target level amounted to EUR 251.5 million, whereas the buffer of additional financial means of the FGDL amounted to EUR 31.8 million. The covered deposits which amounted to EUR 31.8 billion as at 31 December 2018 increased by 5% to reach EUR 33.4 billion at the end of 2019.

Chapter XIX

Financial crime



CSSF supervision for combating money laundering and terrorist financing

The off-site and on-site supervision is an integral part of the missions entrusted to the CSSF as regards the fight against money laundering and terrorist financing (AML/CFT). In this context and to accomplish this mission in the most efficient way, the CSSF continued to make adjustments to its internal functioning by creating, within the prudential supervision departments, divisions dedicated to AML/CFT, and at the central level of the legal department, a horizontal coordination function of this supervision. Defining responsibilities for AML/CFT supervision goes hand in hand with the setting-up of an internal AML/CFT expert working committee under the responsibility of the legal department, as well as of a steering committee including the whole Executive Board of the CSSF. With most importance being afforded to communication with professionals of the financial sector regarding AML/CFT, the CSSF is serving the financial sector not only through single exchanges with professionals in connection with supervision, but also by holding conferences in which it participates to transmit its AML/CFT recommendations to the supervised professionals or by disclosing instructions and any useful information in the uncompromising fight against money laundering and terrorist financing.

1.1. Off-site supervision

1.1.1. Credit institutions

The year 2019 saw the inauguration, within the "Banking Supervision" department, of a new AML/CFT off-site division which centralises

the AML/CFT supervision activities regarding banks and gathers the experts that were previously attached to other divisions of the department. The AML/CFT off-site division carries out a mainly desk-based supervision, using any relevant information sources from banks, *réviseurs d'entreprises* (statutory auditors), national, European and international authorities as well as from other private or public sources.

The division works closely with the analysts in charge of the prudential supervision of banks, the teams dedicated to on-site inspections and its counterparts from other supervisory departments.

Beyond the off-site AML/CFT supervision and the annual classification of banks according to their ML/TF risk level, the year 2019 was largely shaped by the work performed as part of the sub-sector analysis of ML/TF risks for private banks in Luxembourg.

The "Private Banking Sub-Sector Risk Assessment" (PB SSRA) extends the "National Risk Assessment" (NRA) of the Grand Duchy of Luxembourg, published in December 2018, which concluded that the private banking sub-sector posed the highest ML/TF risk of the entire banking sector. The PB SSRA analyses private banking activities from the perspective of the main ML/TF threats and weaknesses of the sub-sector.

Upon completion of the preparatory work, including the analysis of various internal, national and international information sources, the CSSF crafted the first draft of its analysis whose content and findings have been discussed with the private sector.

The Private Banking Group Luxembourg (PBGL) was involved in this work and it was decided to create a permanent group of experts (Expert Working Group AML PB) at the level of the ABBL, which includes representatives of banks providing private banking services, as well as CSSF and ABBL representatives. This working group will serve as a platform for the exchange of AML/CFT information and thoughts for private customer management.

As from the second quarter of 2019, the content and findings of the PB SSRA have been discussed regularly and an open dialogue was established between the representatives of banks and those of the CSSF, resulting in the publication of the PB SSRA on 20 December 2019.

As of 2020, the Expert Working Group AML PB will be joined by a representative of the Financial Intelligence Unit (FIU), improving thus the exchange between the private sector and the supervisory authority by adding a legal perspective.

1.1.2. Investment firms

The control of compliance with professional AML/CFT obligations by investment firms is an integral part of the supervisory framework put in place by the CSSF. The AML/CFT supervision by the CSSF is based on a multiannual control programme which combines off-site and on-site supervision measures. A dedicated team has been set up within the "Supervision of investment firms" department for a centralised management of the aspects of the off-site AML/CFT supervision of investment firms.

This off-site supervision includes, inter alia, the analysis of the work carried out by the réviseur d'entreprises agréé (approved statutory auditor) and the analysis of the reports drawn up by the internal control functions (compliance function, internal audit function and risk control function). Moreover, an annual AML/CFT questionnaire, which enables the CSSF to collect quantitative and qualitative data from each entity, is provided to investment firms.

Based on the data collected in the AML/CFT questionnaire, the CSSF assigns an automatic rating to each investment firm. This automatic rating is subject to the expert judgement

reached from all the on-site and off-site information at the CSSF's disposal, leading to a final ML/TF rating per investment firm. By adopting a risk-based approach, the final ML/TF risk rating aims at establishing the off-site and on-site AML/CFT supervisory programme of the CSSF. Indeed, these final ratings are used as allocation key of the resources available (on-site and off-site). The AML/CFT team also participates in monitoring the AML/CFT remediation plans put in place by investment firms.

1.1.3. Specialised PFS

As in the previous year, the CSSF requested all PFS supervised by the CSSF to answer the AML/CFT questionnaire. The quantitative data collected have been integrated in the off-site AML/CFT supervision which has been performed by applying a risk-based approach. Consequently, each specialised PFS was subject to a risk assessment in terms of AML/CFT.

The CSSF used its right of injunction against one supervised entity which did not provide the AML/CFT questionnaire on time.

A total of 44 observation letters were sent with respect to shortcomings identified in the reports provided within the framework of the 2017 closing documents, of which 11 letters related specifically to specialised PFS failing to comply with Circular CSSF 17/650.

Following the publication of the 2018 Annual Report of the FIU, 28 emails were sent to specialised PFS to ask them to register on goAML.

Specialised PFS, which qualify as trust and company service providers, have been made aware of the FATF's document entitled "FATF Guidance for a Risk-Based Approach for Trust and Company Service Providers" and published on 26 June 2019.

On 3 December 2019, an AML/CFT conference was organised, gathering almost three quarters of the specialised PFS. Representatives of other local authorities were also present.

In 2019, eight interviews with specialised PFS took place at the CSSF to discuss specific AML/CFT focus points, resulting, in particular, from the answers provided in the 2017 and

2018 AML/CFT questionnaires. Following these interviews, observation letters were sent to two specialised PFS.

1.1.4. Payment institutions and electronic money institutions

ML/TF-risk supervision within Luxembourg payment institutions and electronic money institutions is an integral part of the prudential supervisory framework of these institutions. Thus, the supervision of ML/TF risks is subject to a multiannual control programme which combines off-site and on-site supervision.

A team dedicated to the off-site supervision of ML/TF risks of payment institutions and electronic money institutions has been set up within the "Innovation, payments, market infrastructures and governance" department in 2019. This team manages the aspects of the AML/CFT supervision of payment institutions and electronic money institutions as well as of branches and agents of payment institutions or electronic money institutions authorised in other EU Member States.

The AML/CFT strategy of the CSSF, which allows a more efficient control of the professionals of the financial sector with respect to AML/CFT, requires the adoption of a risk-based approach for the AML/CFT supervision. Thus, as with the other professionals of the financial sector, an annual AML/CFT questionnaire is sent to payment institutions and electronic money institutions as well as to branches and agents 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. These data and information allow risks to be assessed in order to better identify the current risks and to have comparable data available for a harmonised assessment of these institutions and agents in Luxembourg. They are also used to allocate the available (on-site and off-site) resources to AML/CFT controls, in accordance with the basic principle governing the risk-based supervision.

The key elements of the off-site supervision of ML/TF risks are based on the analysis of the reports of the management bodies, the

compliance function and the internal audit function, on the analysis of the work carried out by the *réviseur d'entreprises agréé* (approved statutory auditor) as part of the long form report and, where relevant, on the critical review of the AML/CFT procedures established by these institutions, in particular, in the event of any material change having an impact on their activities and/or their AML/CFT internal control arrangements.

Meetings are also held and contacts are maintained, on a regular basis, with the compliance officers and the members of the management bodies and administrative bodies of these institutions 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), of their organisation as well as of their internal control arrangements and to raise appropriate awareness of these players to ML/TF risks and, in particular, to emerging ML/TF risks related to the use and exploitation of new technologies.

The team set up within the "Innovation, payments, market infrastructures and governance" department also takes part in the ML/TF risk assessment of the application files of new payment institutions or electronic money institutions.

1.1.5. UCI departments

The "UCI AML" division, which was created in February 2019, is composed of seven agents as at 31 December 2019. The team conducts remote (desk-based) controls and face-to-face meetings covering AML/CFT together with the other divisions of the UCI departments. The team also manages the administration of the annual AML/CFT questionnaire and the analysis of the answers provided by the IFMs and the products which have not appointed a management company.

In 2019, two AML/CFT conferences were organised by the UCI departments to exchange views with the supervised entities and to share feedback on the results of the supervisory measures.

During the year, the "UCI AML" division held 29 interviews focussing on AML/CFT based

on an annual inspection plan drawn up on a risk-based approach. A total of 135 injunction letters were sent to professionals that failed to submit the AML/CFT questionnaire on time and 14 administrative fines were imposed on professionals that did not cooperate with the CSSF within the framework of this questionnaire.

Moreover, the CSSF consulted various foreign supervisory authorities as part of its mission of supervision of UCITS and AIFs managed by a management company authorised by the competent authorities of another Member State in accordance with Directive 2009/65/EC and by a manager authorised by the competent authorities of another Member State in accordance with Directive 2011/61/EU or by a manager established in a third country, respectively. The foreign authorities were consulted more specifically in order for the CSSF to be able to ensure that the management companies and the AIFMs, which were selected according to an analysis of the assets under management, have proper procedures in place to combat money laundering and terrorist financing. To this end, the CSSF consulted seven authorities of other Member States and five authorities of third countries.

Finally, the "UCI AML" division continued the activities of the Expert Working Group AML UCI put in place in 2018 and welcomed new members in 2019. The current members are thus representatives of ALFI, ALCO, ABBL, LPEA, LUXREAL, IRE, *Barreau* (Luxembourg Bar) and the FIU. In 2019, this working group met, on a monthly basis, to address issues such as the identification of the beneficial owners in investment funds, the ML/TF-risk analysis in the area of Luxembourg collective management and the AML/CFT due diligence to be performed on the assets of investment funds.

1.2. On-site supervision

The "Anti-Money Laundering and Countering the Financing of Terrorism" (AML/CFT) on-site inspections are carried out at all the professionals supervised by the CSSF in order to assess whether the quality of the AML/CFT framework is in line with the legal and regulatory requirements.

In 2019, the CSSF "On-site inspection" department carried out 36 AML/CFT control missions with credit institutions, investment

firms, specialised PFS, electronic money institutions, payment institutions and agents of foreign payment institutions.

Ten of these missions targeted the review of a sample of customer files, four of which with a particular focus on high-risk customers. Some shortcomings were identified at several professionals, such as:

- approval of business relationships by an inadequate hierarchical level;
- no critical analysis of the information collected for identification purposes;
- poor understanding of the purpose of a structurally complex legal person customer;
- poor understanding of the ownership and control structure of legal person customers;
- lack of information (and of supporting documents according to risk) on the source of funds and the origin of wealth;
- failure of updating the documents, data and information collected when entering into a business relationship;
- transactions insufficiently analysed to conclude that they are consistent with the activities of the customer or the nature and purpose of the business relationship;
- lack of involvement of the compliance function in the monitoring of customers that are considered high-risk;
- · no control of the customers' reputation.

As in 2018, particular emphasis was given to fulfilling the professional obligations as regards AML/CFT in relation to possible offences of aggravated tax fraud or tax evasion. Furthermore, in some cases, failures to meet the obligation to report any ML/TF suspicion to the FIU were identified.

The 11 "thematic" on-site inspections of 2018 and 2019 focused specifically on the risk-based approach (RBA) applied by professionals and revealed shortcomings with some players in the following:

 risk analysis of the business activities and risk appetite;

- risk assessment of customers and adequacy of the due diligence measures applied;
- country risk assessment and, more specifically, identification of high-risk countries;
- procedures with minor weaknesses with respect to the risk-based approach.

In 2019, the "UCI On-site inspections" department carried out 14 inspections which gave rise to the following main observations at some players:

- no enhanced due diligence measures applied to the intermediaries, as required pursuant to Article 3 of CSSF Regulation No 12-02; in this context, failure to keep the information and documentation, allowing a periodic review of the business relationship, up to date;
- lack of key performance indicators enabling the ongoing monitoring by IFMs of the activities delegated to registrar and transfer agents in accordance with the requirements of point 466 of Circular CSSF 18/698;
- programmes of continuing education not always adapted to the specificities of investment funds under management or not sufficiently taking into account the regulatory provisions applicable in Luxembourg;
- shortcomings in terms of frequency and documentation of controls in respect of the identification of the persons, entities and groups subject to prohibitions or restrictive measures in financial matters, as provided for in Article 33 of CSSF Regulation No 12-02;
- absence of due diligence measures on the assets held by the funds, as required by point 309 of Circular CSSF 18/698.

The six additional thematic missions realised in 2019 by the "UCI On-site inspections" department and relating to the due diligence measures on intermediaries that market UCIs managed by IFMs highlighted weaknesses among certain players with respect to the following:

- due diligence requirements when entering into a business relationship and, in particular, systematic procurement of sufficient information in order to assess the nature of the intermediary's activities and the ML/TF risks relating thereto;
- filtering device with respect to the sanctions lists; in this context, the CSSF reiterates that the filter must also apply to legal representatives and beneficial owners of the relevant entities;
- inadequate application of the risk-factor approach linked to distribution.

2. Amendments to the regulatory framework regarding the fight against money laundering and terrorist financing

2.1. Amendments to the AML/CFT European framework

2.1.1. Directive (EU) 2019/1153 of
20 June 2019 laying down rules
facilitating the use of financial and
other information for the prevention,
detection, investigation or prosecution
of certain criminal offences, and
repealing Council Decision 2000/642/JHA

The directive aims at enhancing security, improving prosecution of financial crimes, combating money laundering and preventing tax crimes in the EU. To this end, it is necessary to improve access to information by Financial Intelligence Units (FIUs) and public authorities responsible for the prevention, detection, investigation or prosecution of serious crime, to enhance their ability to conduct financial investigations and to improve the cooperation between them.

The transposition of this directive into national law was set on 1 August 2021.

2.1.2. Commission Delegated Regulation (EU) 2019/758 of 31 January 2019 supplementing Directive (EU) 2015/849 (IVth AML Directive) with regard to regulatory technical standards for the minimum action and the type of additional measures credit and financial institutions must take to mitigate money laundering and terrorist financing risk in certain third countries

This regulation clarifies the measures to be taken by credit and financial institutions for the effective management of risk where the law of a third country does not permit the implementation of group—wide anti—money laundering and countering the financing of terrorism policies and procedures referred to in Article 45(1) and (3) of the IVth AML Directive, as regards branches or majority—owned subsidiaries established in a third country. It is applicable since 3 September 2019.

It is important to stress the obligation to inform the competent authority of the home Member State provided for in Articles 3 to 7 of the regulation. The obligation to inform the CSSF thus exists in the following situations:

- where the third country's law prohibits or restricts the application of policies and procedures that are necessary to identify and assess the ML/TF risk adequately;
- where the third country's law prohibits or restricts the sharing or processing of customer data for AML/CFT purposes within the group;
- where the third country's law prohibits or restricts the sharing of information related to suspicious transactions by branches and subsidiaries with other entities in the group;
- where the third country's law prohibits or restricts the transfer of data related to customers of a branch or majority-owned subsidiary established in a third country to Luxembourg or a Member State for AML/CFT supervision purposes;
- where the third country's law prohibits or restricts the application of retention measures equivalent to those specified in the IVth AML Directive.

This notification must be made without undue delay and in any case no later than 28 days after identifying the third country concerned. The local restriction or prohibition which triggered the notification to the CSSF should also be mentioned therein.

In accordance with the regulation, credit and financial institutions shall also establish whether consent from the customer and, where applicable, its beneficial owners, can serve as an alternative measure to mitigate the local restrictions or prohibitions.

In the case where the local restrictions or prohibitions cannot be avoided, credit and financial institutions must take additional measures as set out in Article 8 of the regulation.

2.1.3. Non-cooperative jurisdictions for tax purposes

In accordance with the objectives set in order to put an end to the practices leading or likely to lead to a loss of tax revenue for EU Member States, the Council of the EU reviewed its list of non-cooperative jurisdictions for tax purposes five times in 2019. Following the last amendment of 14 November 2019, the list includes the following jurisdictions: American Samoa, Fiji, Guam, Oman, Samoa, Trinidad and Tobago, the United States Virgin Islands and Vanuatu.

2.1.4.Communication from the European Commission of 24 July 2019: "AML Package"

On 24 July 2019, the European Commission published an important communication aiming at improving the implementation of the EU AML/CFT regulatory framework. This communication was accompanied by four reports¹ that insist on the need for the full implementation of the IVth and Vth AML Directives, while pointing out that there are still a number of structural shortcomings that have to be corrected.

Consequently, the supranational risk assessment report sets out an updated state of

For more details on these reports and conclusions provided by the European Commission, reference is made to https://ec.europa.eu/transparency/regdoc/rep/1/2019/EN/COM-2019-360-F1-EN-MAIN-PART-1.PDF.

play² of the sectoral ML/TF risks. The reports on the assessment of recent high-profile cases relating to money laundering in the financial sector in the EU (called "post mortem" report), on the Financial Intelligence Units (FIUs) and on the interconnection of the centralised registers of bank accounts analyse, for their part, the gaps in the supervision and cooperation applicable to the fight against money laundering and terrorist financing.

Though all the reports are of importance, emphasis should be placed on the "post mortem" report which brought to light significant breaches of substantive obligations arising from the AML directive in force, on the basis of a sample of 10 credit institutions, and over a given period of time. Four categories of deficiencies were identified: (i) inefficient ML/TF prevention systems, (ii) shortcomings related to governance, (iii) misalignment between ML/TF-risk appetite and risk management, and (iv) lack of supervision and disregard of group-level AML/CFT policies which these financial institutions are subject to. Noteworthy here are also the deficiencies in the ML/TF-risk assessment, customer due diligence and suspicious transaction and activity reports to the Financial Intelligence Units.

2.2. Amendments to the Luxembourg legal and regulatory framework

2.2.1. Draft law No 7467 transposing some provisions of Directive (EU) 2018/843 of 30 May 2018 (Vth AML Directive)

The draft law, which was submitted to the Chambre des Députés (Luxembourg chamber of deputies) on 8 August 2019, was subject to government amendments and adopted by the Law of 25 March 2020³.

The text aims at transposing various provisions of the Vth AML Directive. It thus extends the personal scope of application of the relevant professionals, including in particular virtual asset service providers, safekeeping or administration service providers and tied agents of credit institutions and investment firms. It defines "the control via other means" under the definition of "beneficial

2.2.2. Draft law No 7512 establishing a central electronic data retrieval system related to IBAN accounts and safe-deposit boxes and amending the Law of 12 November 2004 on AML/CFT⁴

This draft law, which was submitted on 23 December 2019, aims at completing the transposition of the Vth AML Directive into Luxembourg law:

- by establishing a central electronic data retrieval system related to payment accounts and bank accounts identified by IBAN and safe-deposit boxes held by credit institutions in Luxembourg, allowing the competent AML/CFT authorities and self-regulatory bodies to obtain information on the respective customers;
- by creating a legal framework for the CSSF's AML/CFT supervision of the new virtual asset service providers;
- by introducing particular registration provisions for trust and company service providers.

owner", introduces the definitions of "virtual currency", "virtual asset service provider", "safekeeping or administration service provider", "custodian wallet service" and a new definition of "high-risk country" and enhanced due diligence measures which apply to business relationships or transactions involving such countries. As regards risk assessment, national and supranational risk assessments are clearly mentioned as relevant information to be considered by professionals subject to the CSSF supervision in order to be able to manage and mitigate the risks they might face. The identification and identity verification obligation was specified in order to take account of the new technologies. Finally, the text includes two entire chapters dedicated to the mechanisms of cooperation between national and international AML/CFT authorities.

² The first supranational ML/TF-risk assessment report was published in June 2017.

³ http://www.legilux.public.lu/eli/etat/leg/loi/2020/03/25/a194/jo.

⁴ Under the Law of 25 March 2020, Luxembourg adopted this draft law, the provisions of which entered into force on 26 March 2020 (https://www.cssf.lu/wp-content/uploads/L_250320_data_retrieval.pdf).

2.2.3. Law of 13 January 2019 establishing a Register of beneficial owners

The law was commented in detail in CSSF Newsletter No 216 of January 2019 which is available on the CSSF website.

2.2.4. Grand-ducal Regulation of 15 February 2019 on the registration, payment of administrative fees and access to information recorded in the Register of beneficial owners

This regulation, implementing the aforementioned Law of 13 January 2019, entered into force on 1 March 2019. Applications for registration in the register of beneficial owners had to be submitted by 1 November 2019. The entities concerned benefited from an additional two-month period (compared to the initial deadline of 1 September 2019) to comply with the law. One of the criminal fines provided for in Articles 20 and 21 of the Law of 13 January 2019 refers to the failure to observe the aforementioned deadline.

2.2.5. Ministerial regulations

In 2019, the Ministry of Finance issued nine new ministerial regulations implementing UN Resolutions 1267 (1999), 1989 (2011) and 2253 (2015) concerning ISIL (Da'esh), Al-Qaeda and the persons, groups, undertakings and entities associated with them.

2.2.6. CSSF circulars and other communications⁵

In Circular CSSF 19/732 of 20 December 2019, the CSSF provided clarity on the identification and the verification of the identity of the beneficial owner(s).

The CSSF updated, three times, the list of jurisdictions whose AML/CFT regime has substantial and strategic deficiencies or requires the application of enhanced due diligence measures or is not satisfactory in accordance with the statements of the Financial Action Task Force (FATF) following plenary meetings.

In a communiqué of 9 October 2019, the CSSF invited professionals subject to its supervision

to take notice of the full version of the national ML/TF-risk assessment⁶.

In December 2019, the CSSF published its first assessment of ML/TF risks identified in the private banking sub-sector.

3. CSSF participation in meetings regarding the fight against money laundering and terrorist financing and regarding international financial sanctions

3.1. International dimension

As happens every year, the CSSF participated in several international working groups relating to AML/CFT, including the Expert Group on Money Laundering and Terrorist Financing (EGMLTF) of the European Commission, the Anti-Money Laundering Expert Group (AMLEG) of the Basel Committee on Banking Supervision and the Joint Committee's Sub-Committee on Anti-Money Laundering (AMLC) under the Joint Committee of the three European Supervisory Authorities. This last sub-committee will be changed into the Standing Committee on AML within the EBA and will include national high-level representatives in order to ensure the weight given to the topic and to take account of the new competences passed on to the EBA in this respect. Indeed, the European legislator consolidated the AML/CFT mandates of the three European Supervisory Authorities within the EBA with effect on 1 January 2020. Thus, the EBA was entrusted with the obligation to contribute to preventing the use of the financial system for ML/TF purposes and to lead, coordinate and follow the AML/CFT efforts of all the EU financial services.

The cooperation between the ECB and the CSSF as regards AML/CFT has been strengthened following the signature in January 2019 of a "Multi-lateral agreement on the practical modalities for exchange of information pursuant to Article 57a(2) of Directive (EU) 2015/849".

The CSSF also took part in the work of the FATF which adopted the following key documents in 2019:

⁵ All the communications in this respect are available on the CSSF website (https://www.cssf.lu/en/anti-money-laundering-and-countering-the-financing-of-terrorism/).

⁶ https://www.cssf.lu/en/2019/10/risk-assessment-of-money-laundering-and-terrorist-financing-ml-tf/.

- Guidelines on the risks linked to virtual assets and virtual asset service providers and adaptation of the interpretative note relating to Recommendation 15;
- Guidelines aiming at fostering transparency of the information on beneficial owners of legal entities;
- Guidelines on a risk-based approach in several sectors including trust and company service providers;
- Guidelines for the assessment of risks relating to terrorist financing;
- · Guidelines on digital identity.

For the FATF, under Chinese presidency since July 2019, the promotion and the implementation of an effective supervision by the authorities represent a key topic of the presidency. This priority was at the basis of the creation of a continuous exchange forum between the supervisory authorities under the direction of the FATF, which met the first time in China in November 2019. Another important topic is the FATF's strategic review in order to examine the efficiency of the AML/CFT measures adopted.

A mutual evaluation report was adopted in 2019 for the following countries: Turkey, Russia, Hong Kong, Greece, Finland and China. Since June 2019, the Kingdom of Saudi Arabia was formally welcomed as a FATF member.

The CSSF publishes FATF's AML/CFT information bulletins on its website on a regular basis.

3.2. National dimension

In 2019, the CSSF held several formal meetings with representatives of the FIU. The discussions focused on certain suspicious reports of major importance for the Luxembourg financial centre and on the exchange concerning typologies in the collective investment sector.

Several coordination and consultation meetings of all the national authorities competent in the sphere of AML/CFT were also held this year, under the chairmanship of the Ministry of Justice and the Ministry of Finance, respectively, depending on the topic addressed by the corresponding working groups. These meetings were aimed at working on the

transposition of the Vth AML Directive, taking decisions in respect of international financial sanctions and preparing the FATF plenary meetings.

The CSSF also met with other national supervisory authorities (Commissariat aux Assurances and Administration de l'enregistrement, des domaines et de la TVA) to exchange, inter alia, on the implementation of the AML/CFT supervision.

Finally, it is worth emphasising the AML/CFT conferences organised by the CSSF in March, October and December 2019.

Chapter XX

Financial consumer protection

1. Financial consumer protection and financial education

1.1. Financial consumer protection and financial education at national level

In 2019, the CSSF took measures aiming at protecting investors under MiFIR by adopting the following two regulations:

- CSSF Regulation No 19-05 of 26 June 2019 that prohibits all firms acting in or from Luxembourg from marketing, distributing or selling binary options to retail clients from 1 July 2019. The CSSF rules, which are permanent, reflect the substance of ESMA's temporary restrictions relating to binary options in the EU.
- CSSF Regulation No 19-06 of 26 June 2019 that imposes restrictions, under certain conditions, on all firms acting in or from Luxembourg as regards the marketing, distribution or sale of contracts for differences (CFDs) to retail clients from 1 August 2019. The CSSF rules, which are permanent, reflect the substance of ESMA's temporary restrictions relating to contracts for differences in the EU.

Moreover, in the context of the implementation of the national strategy for financial education, the CSSF developed, in collaboration with the Financial Consumer Protection Committee, several tools designed to promote financial education in Luxembourg. These tools were presented at a press conference on 19 November 2019, in the presence of Pierre Gramegna, Minister of Finance, and Claude Meisch, Minister of National Education. These include the

new information portal www.letzfin.lu and various downloadable applications aimed at heightening awareness among consumers of all ages about financial issues.

· Information portal "lëtzfin"

The website www.letzfin.lu includes key information on financial situations which most people face in real life. Its purpose is consumer training and protection by making basic financial information available to help consumers analysing and understanding their financial situation and making informed and appropriate choices. The website also offers practical tools to simulate credit calculations, establish one's personal budget, test one's knowledge with a quiz or view explanatory videos. The information portal "lëtzfin" is the backbone of all the initiatives that will be launched within the context of this national strategy.



• FinGoL - The Financial Game of Life

The Financial Game of Life (FinGoL) is a dynamic educational game in the form

of a chatbot developed by students of the Luxembourg Tech School. FinGoL targets a young audience and allows simulating, in a playful way, the financial life of an adult as well as situations s/he faces in real life.

"lëtzfin budget", a budget management application for adults

Keeping a monthly budget is key to prevent situations of financial hardship which may, in some instances, lead to over-indebtedness. This risk is minimised if the consumer has a clear view of his/her income and expenses. The application allows users to establish and manage their budget, to identify unnecessary expenses and to plan their future financial situation.

"lëtzfin Pocket money", a budget management application for young people

The application "lëtzfin Pocket money" aims at making young people aware of the importance of managing their personal finances and actively involves the parents in this process. The application allows young people to better track their use of pocket money and other income. Parents take on the role of bank to guide their children in the management of their personal budget. The young people's and their parents' smartphones are linked through a QR code without the parents being able to view the details of the data entered by young people.

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 on the 10 High-Level Principles of the G20 relating to financial consumer protection continued in 2019. Moreover, the Task Force demonstrated its interest for the following topics: crypto-currencies, financial consumer protection in the digital age, financial consumer protection in the field of consumer credit and inclusion of ageing population.

1.2.2. International Financial Consumer Protection Network (FinCoNet)

FinCoNet is an international organisation gathering supervisory authorities from 27 countries that are responsible for financial consumer protection. It aims at fostering information exchange and cooperation between supervisory authorities in order to encourage proper conduct of the market and strong consumer protection in banking and credit.

In 2019, FinCoNet published the report "Digitalisation of Short-Term, High-Cost Consumer Credit: Guidance to Supervisors" which includes guidelines for supervisory authorities to enhance the prudential supervision in the area of digitalisation of consumer credit. These guidelines were developed to support and assist supervisory authorities in addressing key risks relating to financial consumer protection, which are posed by the short-term, high-interest consumer credit offered by means of digital channels. Furthermore, FinCoNet organised an international seminar on "Supervision and Behavioural Insights", in cooperation with Banca d'Italia, in 2019.

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 2019, 123 countries were represented in the INFE. A total of 91 authorities, including the CSSF, have the status of full members.

Following the publication of "G20 Fukuoka Policy Priorities on Aging and Financial Inclusion", the INFE is working on a more detailed report containing an analysis of the questions relating to the protection of consumers of financial products, notably in fields such as the fight against the financial exploitation of elderly people, frauds and scams, the fair treatment of consumers, appropriate financial products and the acknowledgement of the vulnerabilities of elderly people.

In 2019, the INFE published with IOSCO's Committee 8 the document entitled "Core Competencies Framework on Financial Literacy for Investors". Moreover, the INFE worked on the recommendations aiming at protecting consumers in the fields of consumer credit, financial education at the workplace or the Digital Financial Literacy. These recommendations basically deal with the integration of young people in the financial world, in an adequate and age-appropriate way, by using innovation and digital technology.

It should also be noted that the INFE took over the organisation of the Global Money Week from the Child Youth Finance International. Moreover, a new website (www.financial-education.org) was launched to inform the public of the projects and the events as part of the OECD and INFE activities in respect of financial education.

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 2019, IOSCO and the INFE published a framework relating to the basic competences in the financial education of investors. In addition, Committee 8 analysed the use of behavioural economics models as regards financial education and published a report entitled "The Application of Behavioural Insights to Retail Investor Protection".

Other topics covered within the Committee include financial education in an ageing society, the handling of retail investors' complaints, virtual currencies, frauds on social media platforms and sustainable finance.

2. Alternative dispute resolution

In 2019, 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 handle requests for the alternative resolution of disputes made by consumers as such, but it also handles disputes between professionals of the financial sector in order to provide an amicable resolution without having to go to court.

At the beginning of the year, the CSSF provided the Minister of Economy, for the first time, with the required information as regards its activities relating to the alternative dispute resolution in accordance with Article L. 431–3 of the Consumer Code. In this respect, the CSSF submits, every two years, information concerning, inter alia, the number and the nature of the disputes it has received as well as the significant and recurring issues at the origin of these disputes and it assesses the efficiency of its alternative dispute resolution procedure.

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 aforementioned Article L.432–4¹.

2.1. Statistics regarding CSSF complaint handling in 2019

In 2019, the CSSF received 903 complaint files and closed 827 complaint files (including files received but not closed before 1 January 2019).

Outcome of the CSSF's intervention/reasons for closing the files



¹ The statistics mirror the CSSF's activities relating to the alternative dispute resolution: they concern not only consumer disputes as the CSSF also handles complaints from professionals, including professionals of the financial sector, against professionals supervised by the CSSF.

Upon reception of a financial consumer complaint, the CSSF sends an acknowledgement of receipt with 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 complaints whom the complainant should contact at the entity concerned in order to reach an amicable settlement, and the link to the webpage where useful information on the alternative handling of complaints by the CSSF is available to the complainant.

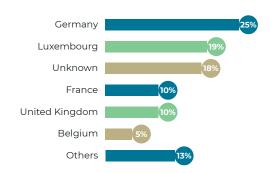
Judging by the high number of disputes that have been settled following these first instructions by the CSSF, the CSSF's approach consisting in favouring the dialogue between the parties to the disputes and not intervening immediately with the supervised entity concerned by a complaint, is bearing fruit.

It should be noted that, in 2019, the CSSF took 115 days, on average, to close a duly examined file.

A total of 179 requests for the alternative resolution of complaints were inadmissible for the following reasons:

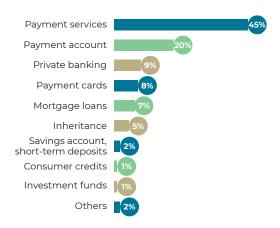
- complaints involving entities that are not subject to the CSSF's supervision (68%);
- complaints concerning a non-financial product (13%);
- complaints falling within the scope of the insurance sector (8%);
- failure of the complainant's capacity to act (8%);
- expiry of the one-year time limit for filing the complaint with the CSSF (1%);
- · complaints already heard by a court (1%);
- frivolous or vexatious request (1%).

Breakdown of the disputes according to the complainants' country of residence



There is a large part of complaints from Germany with 25% of the total, which is similar to 2018 (30%). The country of residence of the complainants is not identified in 18% of the cases, which is, in general, due to the fact that these complainants contacted the CSSF by way of emails without indicating their country of residence. Finally, the category "Others" covers 38 different countries.

Breakdown of complaints according to their object



The breakdown of complaints according to their object remained stable in 2019 compared to the previous years. The major share of complaints (45%) concerned problems linked to the use of electronic payment services. The share of complaints relating to payment accounts (20%) increased as compared to the previous financial year (13% in 2018). The same applies to complaints relating to loan mortgages (7% against 2% in 2018).

2.2. Complaints handled in 2019

2.2.1. Payment transactions using a bank card

In 2019, the CSSF received several complaints relating to unauthorised payments made by using a payment card.

In one case, for example, the complainant challenged the refusal of the bank to reimburse payments made by a person who stole his payment card. According to the complainant, he provided evidence for the fraudulent use of his bank card by producing a copy of the complaint he had lodged with the police as well as copies of the bank statements which purported to prove that the disputed transactions followed the theft of the bank card.

The bank has, for its part, noted that all the disputed transactions were validated with the PIN code corresponding to the bank card which is, in principle, secret. In this light, it considered that the thief could only have access to the PIN code of the complainant's card as a result of a negligence on the part of the latter. It also argued that the terms and conditions provide that the holder of the bank card bears notably the losses stemming from any unauthorised payment transaction in case of gross negligence on his part. The bank added that the holder of a bank card is required by contract to take precautions with the card. Thus, he is contractually obliged to keep his bank card in a safe place and to memorise his personal code which must be kept secret and which should not be written down either on the card or any other document kept with this card.

Neither was the bank convinced by the version of facts presented by the complainant. In his complaint, the complainant mentioned that the thief managed to see his code during a payment made with the card while in a letter to the bank, he stated that his code had supposedly been seen by a malicious third party during a cash withdrawal.

After having analysed the case file and given the contradictions in the complainant's statements, the CSSF closed the file without holding the bank liable. In particular, it found that, in the complaint filed by the complainant with the police, he did not prove that he had taken every precaution to safeguard the PIN code of his bank card.

In another case of unauthorised payments with a bank card, the CSSF, faced with the bank's compensation refusal, had to determine whether a complaining couple actually complied with the necessary security measures.

The bank stressed that the contentious withdrawals were made using the PIN codes of the bank cards because the electronic chips of the cards had been properly read, which proves that the contentious transactions were authorised using the PIN codes of the cards in question.

The CSSF noted that, over a relatively long period preceding the theft of the bank cards, no transaction had been made with these cards, so that no opportunity had arisen for a malicious person to copy the PIN code. Yet, in general, where criminals know a PIN code, they use the stolen cards as soon as possible before their victims block their cards. With regard to the analysis of the documents and the circumstances of the file which were unclear, the CSSF decided not to accede to the complaint.

In another file submitted to the CSSF, the complainant asked his bank for a new bank card. Four weeks later, the complainant contacted the bank to rescind unauthorised withdrawals made from his bank account with a bank card. He pointed out that, at the time the contentious withdrawals were made, he did not have a bank card. The bank refused to reimburse the complainant on the ground that the contentious withdrawals were made with the new bank card and validated by using the PIN code. It excluded any possibility of unauthorised payment and stressed that two weeks after the complainant's request for a new card, it had sent him a first letter including the PIN code of the new card by post and, on the following day, another letter with the card in question.

The analysis of the file documents confirmed that the address to which the bank said it had sent the new bank card and the PIN code was the address agreed with the complainant as the one to be used to send him his correspondence. However, the CSSF noticed that the complainant conceded that someone could have intercepted the mail, in so far as he indicated that he shared his mailbox with housemates.

In this particular context, the CSSF asked the bank to provide it with information on how it complied with Article 84(1)(a) of the Law on payment services, which requires banks issuing payment instruments to ensure that the personalised security data are not accessible to parties other than the payment service user authorised to use this payment instrument. The CSSF also drew the bank's attention to the provisions of Article 84(2) of the aforementioned law, which provides that banks shall bear the risk of sending a payment instrument or any personalised security credentials relating to it to the payment service user. As a result, the bank must ensure that the PIN code sent to the customer is only available to this customer and that when a bank card and PIN code are sent, it must ensure that the bank card and the PIN code reach the appropriate person.

The CSSF concluded that the bank did not sufficiently ensure compliance with its obligations arising from Articles 84(1) and 84(2) of the Law on payment services, in particular on the grounds that it was unable to prove that the complainant received the bank card and PIN code. The CSSF requested the bank to reimburse the complainant the amount corresponding to the unauthorised withdrawals, which the bank accepted to do.

2.2.2. Online payment transactions

In 2019, the CSSF handled several complaints from people claiming to be victims of fraudulent online payment transactions.

In one of these disputes, the complainant, i.e. a commercial company, stated that it uncovered, during an accounting control, unauthorised electronic transfers made from its account. However, the bank considered that these transfers had been authorised by the complainant.

In its arguments to the CSSF, the complainant stressed that the contentious transfers had gone unnoticed because of the relatively low amount of each transfer which varied between EUR 100 and EUR 500. Moreover, the internal archiving of these transfers made them practically invisible on the bank account of the complainant.

The bank drew the CSSF's attention to its terms and conditions which provide that customers commit themselves to closely and regularly monitor their accounts in order to inform the bank of any error or unauthorised transaction. In this respect, the bank noticed that shortly before the contentious transfers were made, a secondary user had been added to the complainant's account through a connection that corresponded to the log-in habits of the CEO of the complainant company.

The CSSF noticed that this connection had also been used to fund bank cards with the contentious transfers. Moreover, the investigation following the complaint revealed that the bank cards in question were linked to the CEO of the complainant company. This CEO had been given very extensive powers over the accounts of the complainant company. The bank was of the view that, under these circumstances, it could not be held that the contentious transfers had not been authorised by the complainant company.

The CSSF deduced that the complainant did not monitor its bank account with sufficient attention or that, in fact, it gave approval for the contentious transactions. In either case, the CSSF could not accede to the complaint.

In another case, the complainant, victim of an online fraud, blamed the bank for its refusal to compensate her for a damage she suffered. The complainant received, on her mobile phone, a message asking her to verify the access codes of her online bank account. She completed these steps thinking that she was in contact with her bank. In reality, the complainant fell into the trap of identity thieves who managed to steal her personal bank data by sending her a misleading message.

The bank argued that all the contentious transfers were made possible owing to the complainant's gross negligence. The complainant should have taken care not to communicate her confidential bank data without having verified the real source of the message received on her mobile phone.

The CSSF noted that the complainant actually received a message which led her to communicate her personalised security data such as the access codes to her online account.

By logging in via the link received in this message, the complainant did not safeguard the security of her personalised security data as required, in particular, by the Law on payment services and by the terms and conditions of the bank that informed her that she should be particularly careful when connecting to the website of the bank. Consequently, the CSSF could not accede to the complaint.

2.2.3. Asset management

Some customers manage their assets themselves and the bank just carries out their instructions. Other customers get advice from their bank when they manage their assets as was the case in the following matter where the complainant entered into an investment advice contract with his bank and blamed it for not having responded to his repeated requests for advice.

According to the complainant, he asked his personal advisor at the bank to advise him on the strategy to be adopted with respect to certain financial products he held in his portfolio, in particular, in order to know whether he should reduce his short positions. Since he did not obtain any response from his advisor, he continued to maintain the short positions. Finally, the complainant was advised by another manager of the bank to reduce these short positions in the very short term. This late advice allowed the complainant to avoid significant losses which he would have suffered if he had kept his short positions.

The complainant considered that he should have received the appropriate advice to reduce his short positions earlier from his advisor and blamed the bank for clear lack of due diligence. The complainant drew the CSSF's attention to the contract concluded with the bank under which the bank committed itself to provide the complainant with investment advice based upon analyses and researches made by specialists on a regular basis.

However, the bank argued that the complainant's personal advisor responded to his emails with clear advice which should have allowed the complainant to take sound investment decisions. Nevertheless, when it came to the complainant's request for advice regarding the decisions to be taken with respect to the short positions, the bank was unable to

prove that the personal advisor listened to the customer and that he provided the customer with quality advice.

Moreover, the CSSF noticed that the little advice given to the complainant by his advisor was too general to be considered as advice meeting the high quality criteria of the investment advice contract.

The CSSF argued that the bank did not comply with Article 37–3(1) of the Law of 5 April 1993 on the financial sector which provides that "When providing investment services or, where appropriate, ancillary services to clients, credit institutions and investment firms shall act honestly, fairly and professionally in accordance with the best interests of their clients (...)" and asked the bank to make the complainant a compensatory offer for the damage suffered.

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 2019, the CSSF took part in the two half-yearly plenary meetings of the network. FIN-NET members exchanged their views on topical issues, including the potential consequences of Brexit on alternative dispute resolution. They also analysed the answers to the questionnaire aiming to compare the implementation of Directive 2013/11/EU of 21 May 2013 on alternative dispute resolution (ADR) for consumer disputes by ADR entities in Europe.

Other topics discussed within FIN-NET concerned financial education, the use of cross-border payment services in the light of new technologies and the complaint handling by ADR entities of a Member State that must apply the law of another Member State because of the provisions of a contract whose performance is at the heart of the dispute.

List of abbreviations

ABBL Association des Banques et Banquiers, Luxembourg - Luxembourg

Bankers' Association

AIF Alternative Investment Fund

AIFM Alternative Investment Fund Manager

ALFI Association Luxembourgeoise des Fonds d'Investissement - Association of the

Luxembourg Fund Industry

AML/CFT Anti-Money Laundering and Counter-Terrorist Financing

ASSEP Pension savings association

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 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

CdRS Comité du risque systémique – Luxembourg Systemic Risk Committee

CPDI Conseil de protection des déposants et des investisseurs – Council for the

Protection of Depositors and Investors

CRD IV Capital Requirements Directive - Directive 2013/36/EU of 26 June 2013 on access

to the activity of credit institutions and the prudential supervision of credit

institutions and investment firms

CRR Capital Requirements Regulation - Regulation (EU) No 575/2013 of 26 June 2013 on

prudential requirements for credit institutions and investment firms

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

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

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

IAS International Accounting Standards

IFM Investment Fund Manager

IFRS International Financial Reporting Standards

IMF International Monetary Fund

IML Institut Monétaire Luxembourgeois - Luxembourg Monetary Institute (1983-1998)

IOSCO International Organization of Securities Commissions

ITS Implementing Technical Standards

JST Joint Supervisory Team
LSI Less significant institution

MiFID Markets in Financial Instruments Directive
MiFIR Markets in Financial Instruments Regulation
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

RTS Regulatory Technical Standards

SEPCAV Pension savings company with variable capital

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

SIAG Self-managed investment company
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

UCI Undertaking for Collective Investment

UCITS Undertaking for Collective Investment in Transferable Securities

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

Notes

Notes



Commission de Surveillance du Secteur Financier

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