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TECHNICAL NOTE—SELECTED ISSUES IN BANKING SUPERVISION

This Technical Note on Selected Issues in Banking Supervision for Luxembourg was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed in July 2017.

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SELECTED ISSUES IN BANKING SUPERVISION

Prepared By
Monetary and Capital Markets Department

This Technical Note was prepared by IMF staff in the context of the Financial Sector Assessment Program in Luxembourg. It contains technical analysis and detailed information underpinning the FSAP's findings and recommendations. Further information on the FSAP can be found at http://www.imf.org/external/np/fsap/fssa.aspx

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Glossary

ABBL	Association des banques et banquiers Luxembourg (Luxembourg Bankers' Association)
ALFI	Luxembourg association for the funds' industry
AML/CFT	Anti-Money Laundering/Combatting the Financing of Terrorism
Basel Committee	Basel Committee on Banking Supervision
BCL	Central Bank of Luxembourg
BCP	Basel Core Principles for Effective Banking Supervision
BSD	Banks' Supervision Department
CAA	Commissariat aux Assurances
CEBS	Committee of European Banking Supervisors (Predecessor to EBA)
CESR	Committee of European Securities Regulators (Predecessor to ESMA)
COREP	EU common reporting framework
CP	Core Principle
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
CSSF	Commission for the Supervision of the Financial Sector or Commission de Surveillance du Secteur Financier
EBA	European Banking Authority
ECB	European Central Bank
EEA	European Economic Area
EIOPA	European Insurance and Occupational Pensions Authority
EU	European Union
ESMA	European Securities and Markets Authority
FICOD	EU Financial Conglomerates Directive
FINREP	EU financial reporting framework
FSAP	Financial Sector Assessment Program
FTE	Full time equivalent
GAAP	Generally accepted accounting principles
HQLA	High Quality Liquidity Assets
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International financial reporting standards
LCR	Liquidity Coverage Ratio
IML	Institut Monétaire Luxembourgeois or Luxembourg Monetary Institute
LSI	Lesser Significant Institution
JST	Joint Supervisory Team
MREL	Minimum requirements for own funds and eligible liabilities
MiFID	Markets in Financial Instruments Directive

MoU	Memorandum of understanding
NCA	National Competent Authority
OND	Options and Discretions
PSF	Professionals of the financial sector
RGD	Règlement grand-ducal or Grand ducal regulation
SI	Significant Institution
SSM	Single Supervisory Mechanism
SRM	Single Resolution Mechanism
SREP	Supervisory Review and Evaluation Process
TLAC	Total loss absorbing capacity

EXECUTIVE SUMMARY

This review examines aspects of the banking supervision regime in Luxembourg having due regard to the establishment of the SSM.[1] In addition to updating the findings of the previous FSAP of 2011, it concentrates on those issues arising from Luxembourg's unique position as an international financial center including high levels of intra-group exposures by Luxembourg banks to their foreign parents and notable linkages between investment funds and banks. It also examines potential threats to the operational independence of the CSSF, the adequacy of on-site supervisory resources and potential risks arising from the continuing increase in residential house prices.

Significant progress has been made in relation to the recommendations made in the 2011 FSAP. The Finance Ministry is no longer responsible for the granting or revocation of banking licenses, the CSSF no longer has an industry promotional role, resources have increased substantially and there has been a significant increase in the implementation of sanctioning powers. However, some findings have not been fully addressed, e.g., governance structures at the CSSF.

Remaining weaknesses and vulnerabilities identified during this review of selected issues are listed below.

- There still exists potential for government or industry interference in the operational independence of the CSSF, although the mission did not encounter any evidence of any such interference;
- While resources have increased significantly in recent years, the number of on-site inspectors is still relatively low, though it should be noted there is a major drive currently underway to recruit additional staff in this area;
- There are still some delays in completing on-site inspection reports;
- The frequency of on-site inspections of Luxembourg subsidiaries of Significant Institutions is on the low side;
- The level of intra-group exposures by Luxembourg banks to their foreign parents continues to be high, posing potential maturity and currency transformation risks to the Luxembourg banks. The situation has been addressed to some degree by external factors (e.g., advent of SSM) and certain safeguards introduced by the legislator and CSSF, but the underlying risk remains, improvements to the supervision of these exposures are put forward;
- The investment funds industry continues to grow strongly and the volume of deposits placed by such funds with custodian banks continues to increase as a share of outstanding liabilities,

[1] The review was carried out by Michael Deasy, IMF external expert.

potentially posing a funding risk to these banks in the event of a shock to the investment funds industry;

- Residential real estate valuations are at rather elevated levels, and increasingly banks are advancing loans with loan-to-value ratios of greater than 80 percent, potentially posing a threat to mortgage lending banks. At the same time, the CSSF has introduced a number of measures designed to reduce this threat, e.g., setting higher risk weightings where the LTV is above 80 percent for banks using the standardized approach for credit risk; imposing a minimum risk weighting of 15 percent on residential real estate exposures for banks using an internal rating-based approach;

- Luxembourg does not yet have a credit bureau, although it participates in an ECB-sponsored initiative in this regard which will result in a euro area credit bureau which will receive its first set of credit documentation in September 2018. BCL is charged with the implementation of the Luxembourg component.

Table 1. Luxembourg: Main Recommendations	
Recommendation	**Priority/Time frame**
Introduce a governance structure for the CSSF that would remove any potential for interference from the government or industry as is required under CP 2.	Medium/Medium term
Broaden the specific supervisory regime for intra-group exposures designed to limit the risks arising from such exposures that is fully consistent with the ECB Regulation and Guideline resulting from the work on Options and Discretions.	High/Near term
Continue to strengthen the on-site inspection regime through the recruitment of additional staff.	Very High/Near term
Review the adequacy of banking risk experts in the Banking Supervision Department.	Very High/Near term
Reduce timeframe for completion of on-site inspection reports.	High/Near term
Increase frequency of on-site inspections of subsidiaries of Significant Institutions.	High/Near term
Continue to monitor very closely any potential impact on banks from rising residential real estate prices.	Very High/Near term
Harmonize information submitted by banks on loan-to-value and debt-to-income ratios.	High/Near term
Work closely with ECB to include households in its credit bureau initiative.	Medium/Medium term
Complete MOU with BCL on liquidity supervision regarding LSIs.	High/ Medium term
Where warranted and in keeping with the provisions of Core Principle 11—Corrective actions—impose monetary fines commensurate with the breach in question.	Medium/ Medium term
Ensure close interaction with supervisors of parents of Luxembourg banks located outside the euro area.	High/ Near term
Continue to monitor closely banks' holding of sovereign debt.	High/Near term
In line with the recommendations of the 2016 Article IV Staff Report, the authorities should advocate for stronger oversight at the European level of nonbank holding companies that include banks.	Medium/ Medium term

INTRODUCTION

A. Scope and Approach

1. A focused review of certain aspects of the Luxembourg banking supervisory regime was undertaken as part of the 2016 Luxembourg FSAP update. The review was based on various documents prepared by both the ECB and the CSSF and discussions with both agencies. It also involved meetings with the Luxembourg Finance Ministry, the BCL, a number of Luxembourg banks, the Luxembourg Banking Association and a firm of bank external auditors. Scoping meetings were held with both the ECB and the CSSF between May 17–21, 2016. The mission proper involved meetings in Frankfurt between September 6–12 and in Luxembourg between September 13–26, with a close-out meeting in Frankfurt on September 27, 2016.

2. This note uses the 2012 version of the "Basel Core Principles for Effective Banking Supervision" (BCP) as the reference framework, but it does not contain a formal BCP assessment. Instead, it concentrates on those issues arising from Luxembourg's unique position as an international financial services center while also updating the findings of the 2011 BCP assessment. Among these unique features are the high levels of intra-group assets and liabilities held by Luxembourg banking subsidiaries and branches with parents/affiliates, the interconnectedness of Luxembourg's banking and investment funds sector, and high levels of sovereign debt exposure. Potential issues posed by Luxembourg's buoyant residential property market are also considered. The note covers such issues as investment fund management as they pertain to banks so as to emphasize the importance of appropriate focus of supervision in these areas in Luxembourg. Where relevant, these issues are analyzed in greater detail in separate Technical Notes.

3. The various documents considered in the review included the self-assessment and questionnaire completed by the ECB in 2015 in the context of the Germany FSAP. Additionally, the ECB prepared a short Luxembourg-specific questionnaire for the review and the CSSF completed a standard BCP questionnaire supplemented by Luxembourg-specific questions.

4. The mission maintained close coordination and consistency with the modalities of banking supervision in other recent euro area FSAPs. Emphasis was placed on ensuring consistency with the approaches pursued in the euro area FSAPs since the Single Supervisory Mechanism (SSM) entered into operation on November 4, 2014.

5. The author wishes to thank the authorities and private sector participants for their excellent cooperation. The author benefitted greatly from the inputs received and exchanges of views garnered in meetings with supervisors, banks, and industry and professional organizations.

B. Institutional Setting

6. The structure of banking supervision in Luxembourg has changed significantly since the last BCP assessment in 2011. The main change relates to the establishment of the SSM in October 2013, led by the European Central Bank (ECB) and which started its activity in November 2014. The creation of the SSM was prompted by the Euro area crisis in Europe and the desire to quickly build a supra-national authority whose function would be to promote a safer European banking system and the stability of the financial system in the Union and each member State. In November 2014 the ECB assumed responsibility for the supervision of the euro area banking system. In practice, the ECB took responsibility for the direct supervision of large banking groups (Significant Institutions/SIs) while National Competent Authorities (NCAs) continued supervising directly smaller banks (Less Significant Institutions/LSIs), with the ECB maintaining oversight responsibilities relating to the performance of the NCA's supervision of the LSIs and the overall responsibility of ensuring the well-functioning of the SSM. In Luxembourg, the CSSF is assigned as the NCA for supervision of banks.

7. A number of significant EU Banking Directives also came into effect since 2011. These include the Capital Requirements Directive and Regulation (CRD IV/CRR) which effectively transposed Basel III into European law,[2] the Bank Recovery and Resolution Directive (BRRD) which is designed to harmonize and improve the tools for dealing with bank crises across Europe and the Directive on Deposit Guarantee Schemes.

8. The CSSF is responsible for the prudential supervision of Luxembourg's financial sector with the exception of significant credit institutions (the responsibility of the ECB) and insurance undertakings (the responsibility of the Commissariat aux Assurance, CAA). Accordingly, it supervises investment firms, investment funds, securities markets, payment institutions, and the audit profession. Further to the SSM framework and under ECB oversight, it supervises Lesser Significant Institutions. (It shares the supervision of bank liquidity with the BCL—see paragraph 34).

9. Under the SSM Framework Regulation, the Banque Centrale de Luxembourg (BCL) may appoint one or several members to a Joint Supervisory Team (JST) based at the ECB. The JST normally comprises members of the ECB and NCAs. In some JSTs, BCL appoints members where liquidity surveillance is concerned given its responsibility under national law which charges the BCL with the supervision of "the general liquidity situation of the markets as well as evaluating market operators." Thus, references in the SSM framework to the Luxembourg NCA are also applied to the BCL for the purposes of inclusion in JSTs as far as liquidity surveillance is concerned.

[2] In its Regulatory Consistency Assessment Program of December 2014, the Basel Committee noted that while many aspects of the EU implementation of capital requirements mirrored those of Basel, there were significant differences between the two which rendered the EU implementation materially non-compliant with the minimum standards prescribed under the Basel framework, e.g., the Internal Risk-Based (IRB) approach for credit risk was deemed materially non-compliant while the counterparty credit risk component was deemed non-compliant.

10. There are three executive bodies within the CSSF—the Executive Board, the Resolution Board and the Depositor and Investor Protection Board. The Executive Board is the highest executive authority in the CSSF for all matters other than resolution and depositor and investor protection. It consists of a Director General and four other directors. Above the Executive Board is the Board—it, however, has limited powers. Within its field of competence, the CSSF has the power to issue autonomously legally binding prudential regulations. The Resolution Board is the decision-making body within the CSSF in the area of bank resolution (i.e. to make decisions regarding the failure or likely failure of LSIs). The Depositor and Investment Protection Board is the body responsible for the carrying out of deposit and investor protection functions.

11. The defining features of Luxembourg's financial system are its size, outward orientation and interconnectedness. By sector, the main components of the financial system are the investment funds industry (€3.5 trillion in assets under management or 72.1 times GDP), banking industry (€747 billion in assets or 14.3 times GDP), insurance industry (€205 billion in assets or 4.2 times GDP), and the financial market infrastructure (FMI) that clears and settles payments and securities transactions.[3] Since 2011, the date of the last assessment, only banking assets have contracted having declined by about 25 percent from their pre-crisis peak.

12. As at June 30, 2016, there were 143 banks operating in Luxembourg. Of these, 61 are SIs either in their own right (six in number) or as subsidiaries or branches of SIs in other euro area member states. The 61 banks represent about 75 percent of the Luxembourg banking system in terms of aggregate balance sheet size and are supervised directly by the ECB. Of the 143 banks, only five are domestically owned (accounting for 7.2 percent of industry assets), government ownership is significant in three. Notwithstanding the large number of banks, industry assets are somewhat concentrated, with the top five banks (one of which is domestic-majority owned) accounting for almost one third of sector assets.

13. The majority of Luxembourg banks have their origins in European Economic Area (EEA) jurisdictions. At end-December 2015, 77 percent came from that source, 5 percent from the United States and Canada, 7 percent collectively from Brazil, Russia, and China, 5 percent from Switzerland and 6 percent from elsewhere.

14. Subsidiaries and branches of foreign banks domiciled in Luxembourg play a central role in intra-group liquidity management and custodial operations for Luxembourg-domiciled investment funds. A small number of banks serve the domestic economy and are also involved in private banking for high net worth individuals.

[3] It is important to note that the assets under management of the investment fund industry are not directly equivalent to assets in the banking industry. Asset management firms operating investment funds tend to have relatively small balance sheets. They do not retain the risk—end investors do.

15. There is a wide range of business activity undertaken by banks in Luxembourg. Table 2 represents the distribution of assets per business, based on the principal line of activity undertaken by individual banks.

16. Private banking activity has not diminished as a result of the introduction of the EU Directives providing for the exchange of information about bank depositors among member states revenue authorities. Since January 1, 2015 Luxembourg switched to automatic exchange of information under the Savings Directive instead of the imposition of a withholding tax. This initiative has not resulted in any long-term diminution, either in number of institutions engaged in private banking or the activities carried out by these banks in recent years, notwithstanding the fact that the initiative was signaled well in advance of 2015. The number of such banks increased from 38 in 2011 to 42 in 2015. Total assets in these banks increased from €165 billion to €201 billion and assets under management from €121 billion to €144 billion over the same period. The new regime did lead to somewhat of a shift in the customer base of the banks. Small scale depositors withdrew their funds while, following an international marketing initiative, the banks attracted a number of very high net worth individuals, mainly based on Luxembourg's stable reputation.

Table 2. Luxembourg: Distribution of Bank Assets per Business

	Percentage
Corporate finance/trade finance	24.3
Private banking	20.7
Retail and commercial banking	17.2 (Almost all domestic)
Custodian banking	14.4
Intragroup treasury and liquidity management	8.8
Covered bonds banking	8.0
Activities linked to investment funds and firms	2.6
Other activities	4.0
Source: CSSF	

17. The banking sector is generally profitable, well capitalized and liquid. The return on equity was in the region of 10 percent over the last five years but on a declining trend. A number of smaller banks incurred losses in recent years, due mainly to the low interest rate environment and higher administrative charges including the increasing cost of regulation which due to economies of

scale affects smaller banks disproportionately. Because of high capitalization these loses do not pose any immediate risk to the stability of the banks in question. The average solvency ratio is 21.5 percent (twice the required minimum) and most banks comfortably exceed the minimum liquidity ratio required under Basel/C RD IV/CRR. Four banks have solvency ratios of between 10.5 percent, the minimum requirement (including buffers), and 12 percent. The rest have ratios in excess of 12 percent.

18. Luxembourg emerged well from ECB Asset Quality Review carried out by the ECB in 2014 as preparation for its assuming responsibility for banking supervision. In relation to asset quality no additional provisions were recommended. Under the advanced stress test exercise, the banks remained comfortably in excess of minimum core equity tier 1 requirements and Luxembourg was deemed to have transposed CRD IV/CRR in a conservative manner, partly due to its decision not to allow unrealized gains to be included in capital until the final deadline in 2018.

19. Although the economy subsequently recovered strongly, the Luxembourg banking sector was deeply affected by the global financial crisis. Local subsidiaries suffered from the effects of solvency and liquidity problems at their foreign parents. Aggregate bank balance sheets contracted by almost 15 percent in 2009, essentially through interbank deleveraging. At the peak of the financial turmoil, Luxembourg contributed to the bail outs of systemically-important banks, Fortis and Dexia, which were jointly rescued by the authorities of France, Belgium, the Netherlands and Luxembourg, and the local subsidiaries of three failed Icelandic banks. Domestic credit markets, however, were resilient throughout the crisis, both in terms of credit volumes and lending spreads.

C. Market Structure

20. Luxembourg is a founding Member State of the EU, the wider European Economic Area and the euro area. Consequently, it has adopted European directives on regulation of financial services. In addition, it has voluntarily followed a policy of adopting wider international standards, such as those of the Basel Committee. It has also introduced a system of automatic information exchange and withholding tax on financial income in accordance with the EU Savings Directive and the Administrative Cooperation Directive.

21. Luxembourg has implemented IFRS. For prudential reporting purposes, the banks complete their reports using IFRS as is required under EU rules. For annual statutory accounts, however, banks generally use local GAAP (Generally Accepted Accounting Principles) mainly arising from tax considerations.[4] The country has a long history of offering a range of high quality accounting services, including a system of independent audits. The audit profession is supervised by the CSSF which approves statutory auditors and audit firms. The CSSF operates a quality assurance system which is based on best international practice in both accounting and auditing.

[4] The main difference between IFRS and local GAAP is that the latter is based on prudence, i.e. unrealised losses are taken to the profit and loss account whereas unrealised gains are not accounted for. Under IFRS, market value applies to assets held for trading and assets available for sale.

22. Luxembourg's legal system is based on civil law and a number of its laws are based on French or Belgian legislation. Most legislation is the result of EU regulations, directives and decisions. It has a well-established system of business laws which provide adequate mechanisms for the fair resolution of disputes. The judicial system is regarded as independent and efficient.

MAIN FINDINGS

A. Findings from the 2011 BCP Assessment

23. The 2011 assessment concluded that Luxembourg had a high level of compliance with the Basel Core Principles. Where gaps and deficiencies were identified many of these have since been addressed. That assessment was conducted in accordance with the Methodology issued by the Basel Committee on Banking Supervision in October 2006. The present analysis is in accordance with the Methodology issued in 2012. Consequently, direct comparisons are not always valid between both Methodologies.

24. Considerable actions have been taken in response to the 2011 FSAP recommendations (Table 3).

Table 3. Luxembourg: Actions Taken by the Authorities to Address 2011 FSAP Recommendations

Recommendation	Actions Taken
Revise the CSSF's mission and corporate governance structure so as to grant it fully-operational independence, including reducing the influence of government and industry representatives.	Some changes have been introduced (e.g. the ECB is now responsible for the granting and withdrawal of banking licenses, in place of the Ministry of Finance) but the basic governance structure remain in place. (See 'Independence, objectives, etc. of the CSSF'.)
Delete the reference in legislation to a promotional role for the CSSF in respect of the financial sector.	The relevant clause has been deleted from the law.
Clearly segregate the microprudential role of the CSSF and the macroprudential role of the BCL.	Clarity has been introduced through the adoption of CRD IV/CRR. (See 'Independence, objectives, etc. of the CSSF'.) (Please also refer to the Technical Note on Macroprudential Framework.)
Replace existing normative circulars by enforceable regulations.	The use of enforceable regulations has been introduced. (See 'Independence, objectives, etc. of the CSSF'.)
Continue to increase resources and skills for the supervision of banks.	There have been significant increases in staff numbers but on-site resources still have to increase to meet increasing supervisory needs. (See 'Resources and skills in banking supervision' and 'Supervisory approach')
The CSSF should assume responsibility for bank licensing (in place of the Minister of Finance).	The ECB is now responsible for bank licensing.
Ensure the intra-group lending is conducted under arms' length conditions. (There was no explicit obligation to ensure that exposures to related parties were not granted on more favorable terms.)	A rule to this effect was introduced in 2015.
Ensure reporting of on-site findings are not long-delayed (due to staff deployment and the process of escalation in the CSSF hierarchy).	There have been improvements in this area but some delays are still being experienced. (See 'Supervisory approach'.)
Implement more formal sanctioning powers in the area of corrective actions, moving away from heavy reliance on moral suasion.	There has been a significant increase in the implementation of sanctioning powers. (See 'Corrective and Remedial powers'.)

B. Independence, Objectives, etc., of the CSSF

25. The Basel Core Principles for Effective Supervision recommends that the supervisor possesses operational independence and that there is no government or industry interference (Core Principle 2). It further recommends that the process for the appointment and removal of the heads of the supervisory authority and members of its governing body is transparent.

26. The CSSF was established in 1998 using a corporate governance structure that is used for the creation of public bodies in general. As such, it does not meet some of the recommendations of the Basel Core Principles for Effective Supervision in relation to operational independence.

27. The law provides that the CSSF falls "under the direct authority of the minister responsible for the financial center." This is a clause present in the constitution of all state bodies with the exception of the BCL which, according to the principle of independence set forth in EU Union law, cannot be put under the authority of a minister or more generally the government. In the case of the CSSF, the minister does not play an active role and the mission did not encounter any evidence of any ministerial interference on a day to day basis.

28. Disregarding matters of resolution and depositor/investor protector, the CSSF has two boards—one a non-executive board ('the Board') and the other an Executive Board (Executive Board). The Board has seven members, of which four members "shall be appointed on a proposal by the Minister responsible for the CSSF and three shall be appointed on a proposal from the companies and persons subject to supervision." Members are appointed for renewable five year terms. The law is silent on their dismissal nor is there any provision requiring publication of the reason(s) for a dismissal, should one occur. The mission did not encounter any evidence of interference from either the minister or industry. The current composition of the Board is as follows:

- The Director of the Luxembourg Treasury (Chair);
- Vice Chair – to be appointed upon proposal by the Minister (currently vacant);
- Further representative of the Minister responsible for the CSSF;
- The President of the Luxembourg insurance supervisory authority (CAA);
- Representative of a Luxembourg accounting firm;
- The Director General of the Luxembourg Bankers Association (ABBL); and
- The Director General of the Luxembourg association of the funds industry (ALFI).

29. The Board has limited powers and does not concern itself with prudential matters. It meets two to three times a year (in contrast to the Executive Board which meets daily). It is charged with determining the annual budget and approval of the executive board's financial accounts and

management report. It is also responsible for setting the 'long-term investment program'. (This is included in the constitution of all state bodies and generally refers to fixed assets.) The Board gives an opinion on the CSSF's conditions and tariffs (fees raised from the industry), particularly those relating to the terms under which the CSSF's staff costs and operating costs shall be reimbursed by the companies and persons subject to its supervision. Clearly there is a potential for conflict of interest here in that the industry representatives are party to the decision on supervisory resources. It approves the Executive Board's rules and regulations and gives an opinion before any decision is made to dismiss a member of the Executive Board. It also 'sets the CSSF's general policy' although there appears to be general uncertainty about what this means and it has never been exercised.

30. The government may make proposals to the Grand Duke regarding the dismissal of "the members of the Executive Board if any fundamental disagreement arises between the government and the Executive Board concerning policy and execution of the CSSF's remit." The Executive Board (the CSSF's highest executive authority for all functions other than resolution and depositor/investor protection) comprises a director-general and from two to four directors, all nominated by the Grand Duke on a proposal by the government for a five-year term, renewable; currently it has five members. Where there is a dismissal, it will apply to the Executive Board as a whole. The government can also propose to the Grand Duke to remove an individual member of the Executive Board after consultation with the Board if that member no longer meets the conditions of his/her employment or for a serious breach of duty. To date, these powers have not been exercised.

31. The CSSF is funded by the fees paid by the supervised entities. Fees are determined in the context of a five-year budget project. The CSSF determines the level of fees required during the five-year period. If, during that period, the CSSF requires additional funding it can revert to the industry to meet the shortfall. The annual fees are collected directly by the CSSF and do not form part of government revenue. They are incorporated into the annual budget of the CSSF which is determined by the Board on the advice of the Executive Board and then submitted to the government for approval. The mission did not encounter any evidence that the Board, which comprises members proposed by the Minister and industry, has ever rejected the proposals of the Executive Board. The government has always approved the budget.

32. The CSSF law of 1998 has undergone a number of changes to improve corporate governance in the CSSF. The law was amended in 2015 by the introduction of new rules on conflicts of interest of members of the CSSF's governing bodies. The liability regime applying to the CSSF staff and members of decision making bodies have also been clarified and meet the relevant BCP requirements, i.e. they will be covered for expenses in defending supervisory actions or omissions when carrying out their functions in good faith.

33. The CSSF has no longer an industry promotional role. The relevant clause in the legislation has been deleted and the role has been assumed by an agency with a specific mandate to promote the industry. The CSSF is not represented on this agency and the mission did not encounter any evidence of the CSSF playing any informal promotional role.

34. The transposition of the CRD IV into Luxembourg national law has clarified the respective responsibilities of the CSSF and the BCL with regard to banking supervision, with particular reference to the surveillance of liquidity risk. The Luxembourg law transposing the CRD IV provides that the CSSF is the national competent authority responsible for the supervision of credit institutions (covering, inter alia, liquidity). With the establishment of the Single Supervisory Mechanism, the ECB has become the competent authority for the direct supervision of SIs and indirect supervision of LSIs. In consequence, the CSSF is responsible for the supervision of liquidity in all LSI banks. BCL, while not being a designated as the national competent authority under CRD IV, is required under its own legal mandate to supervise the general liquidity situation of the market and market operators which includes banks. In accordance with the national law that requires the coordination and cooperation between the CSSF and the BCL, both have agreed to share tasks for the oversight of liquidity in the banks. More precisely, besides its involvement in JSTs in the case of Significant Institutions, the BCL carries out the liquidity surveillance of 25 of the largest Less Significant Banks, with the CSSF being responsible for the remainder, although the CSSF has access to the liquidity information of all banks.

35. The CSSF, however, retains ultimate responsibility for all LSIs and if, for instance, an enforcement action is required in respect of an LSI under BCL surveillance, it is the CSSF that will take the action. The ECB is competent to impose, directly or indirectly, enforcement and sanctioning measures in respect of SIs. The arrangement between the CSSF and the BCL is not formally documented (for instance, by means of an MOU), although there is an MOU on the technical aspects of information sharing. It would be highly desirable that an MOU between both institutions be initiated in order to bring certainty to their respective supervisory tasks and in order to avoid regulatory gaps or overlap. In a wider context, both the CSSF and BCL, as well as the government and the insurance supervisors, now form part of the recently established Systemic Risk Committee which is tasked with the macro prudential oversight of Luxembourg's financial system.

36. The CSSF has moved away from using non-binding Circulars for transposing laws. It is now using enforceable Regulations and has issued 12 since 2013. It continues to issue Circulars but only to advise of the CSSF's interpretation of the law and regulations.

Recommendations

- The mission did not encounter any evidence that the current governance structure of the CSSF does not have operational independence. Nonetheless, it does have the potential for interference in the future. Accordingly, it is recommended that the authorities consider a structure whereby:
    - the financial supervisor would no longer fall under the direct authority of the minister but would be answerable to Parliament which is the practice in many jurisdictions;
    - have a board comprising independent directors and expand the powers of that independent board to be reasonable for all the functions of the CSSF;

- be in a position to determine its own budget and be responsible for its hire and dismissal of executive staff.

CSSF and the BCL should consider entering into an MOU.

C. Resources and Skills in Banking Supervision

37. CSSF staff numbers have increased significantly since the last BCP assessment and particularly since the establishment of the SSM (Table 4). Staff numbers rose steadily from 358 in 2010 to 675 in 2016. These figures relate to all activities covered by the CSSF. There have been significant increases in banking supervision related areas, particularly since SSM came into effect.

Table 4. Luxembourg: CSSF Staff Numbers

Year	Number of staff
2010	358
2011	402
2012	444
2013	489
2014	551
2015	624
2016	675

Source: CSSF

Since the establishment of the SSM in 2013, there have been significant increases in resources in all areas relating to banking supervision in the CSSF. The number of full time equivalent staff (FTEs) involved in off-and on-site supervision increased by 48.3 percent from 2013 to 2015. The number of on-site supervisors has risen by 106.5 percent while the number of off-site supervisors has increased by 32.8 percent. As of December 2016, around 150 staff members are working for departments which are directly involved in banking supervision. Among these numbers are experts in specialist banking risk areas, e.g., credit risk, capital, liquidity.

38. In particular, the CSSF is augmenting its on-site supervision resources. This is from an extremely low base, however, taking into account that prior to June 2009 CSSF had no on-site inspection department separate from the banking supervision department. For example, in 2011, there were 10 on-site inspectors only, this has risen to 35 in September 2016, many recruited since the advent of the SSM, and the CSSF is in the process of recruiting 20 additional on-site inspectors in 2016 and a similar number in 2017. This is part of a policy move to place greater emphasis on on-

site examinations. Traditionally, in this respect, the CSSF relied on the external auditors' Long Form Report.[5]

39. Staff expenses and total costs have increased by approximately the same proportion as the number of FTEs. At CSSF, since 2013, the cost of off- and on-site supervision increased by 52.1 percent to €12.3 million. The costs to the BCL for banking supervisory tasks increased from €3.5 million in 2013 to €4.37 million in 2015. Within these figures, on-site costs fell from €0.13 million to €0.06 million; off-site rose from €1.62 million to €1.85 million and other functions (contribution to policies, advisory and regulatory functions) rose from €1.83 million to €2.46 million. Staff numbers in terms of FTEs rose from 12.4 to 13.2 personnel at the BCL.

40. Staff turnover at the CSSF has been very low. Over the period 2010 to 2015, the maximum annual turnover rate was 2.82 percent—almost all were either through retirement or staff moving to another public administration agency.

Recommendations

The CSSF should continue to recruit on-site examiners as planned and the BCL should maintain adequate resources for liquidity supervision. (See also 'Supervisory approach'.)

D. Supervisory Approach

41. It was noted during the last BCP assessment in 2011 that certain weaknesses existed in relation to on-site inspections. There was evidence that formal reporting of findings (and consequent action) was often long-delayed. Several factors were cited—modest staffing levels for the then recently established on-site inspection regime and emphasis on anti-money laundering/combating the financing of terrorism (AML/CFT) inspections following a weak report in 2010 from the Financial Action Task Force (FATF). Also, the completion of inspection reports was delayed as inspectors moved on to fresh assignments; there was a tendency to escalate even minor decisions to the most senior executives resulting in inevitable delays and delays were experienced in dealing with potentially confrontational issues.

42. The number of on-site inspectors relative to volume of work is low. As indicated under 'Resources and skills in banking supervision' the CSSF is in the process of developing its on-site inspection program in complement to its reliance on the external auditor's report. The current complement of 42 inspectors—which deals only with on-site inspections—is charged with the

[5] This is an exercise carried out by the external auditors on an annual basis over and above its statutory audit function. The Long Form Report exercise has many of the characteristics of an on-site inspection. It includes carrying out an assessment of the bank's risk management processes, internal controls and the verification on a sample basis of the accuracy of the prudential reports submitted to the CSSF. It carries out quantitative and qualitative analysis of the various banking risks, including credit/counterparty risk, market risk, currency risk, interest rate risk, liquidity risk, operational risk, etc. It also examines solvency, profitability, compliance and private wealth management-related risk. It highlights weaknesses and makes recommendations. Even with the increased emphasis on direct on-site supervision, the CSSF will continue to receive Long Form Reports.

supervision of all LSIs, be available to assist the ECB in its supervision of Luxembourg SIs and assist the ECB in examinations of SIs outside Luxembourg.

43. The level and frequency of on-site inspections is risk-based. The planning of inspections is proposed by the off-site department based on information from the on-going supervision (risk assessment score, results of previous on-site inspections, new activities launched, internal organization, staffing turnover, etc.). The number of inspections (excluding AML/CFT and MiFID (i.e. based on the EU Markets in Financial Instrument Directive) actually fell over the last three years—from 68 in 2013, to 52 in 2014 and to 44 in 2015. Fifty-seven are planned for 2016. All inspections are targeted (i.e. they focus on a particular risk, e.g., credit risk). No full scope inspections are carried out. The maximum interval between inspections in any one bank is about four years.

44. The CSSF has a panel of banking experts who assist on-site examiners, as well as off-site line supervisors. Given the extent of banking activities, the number of experts involved in some risk areas appear low, particularly when certain categories of expert have additional functions (Table 5). In particular, allocating only half an FTE to market risk and interest rate risk in the banking book appears inadequate. While market risk is not significant in Luxembourg, interest rate risk would be present in all banks.

Table 5. Luxembourg: Risk Areas

Risk	Number of full time equivalent	Comments
Credit risk	4.25	Includes assessment of internal models
Operational risk	2.00	Includes governance and internal models
Liquidity	2.00	
Market risk/interest rate risk in the banking book	0.50	
Risk analysis	3.00	Including stress tests
Reporting	3.00	Includes FINREP/COREP
Methods	2.75	SREP methodology
Source: CSSF		

45. The average time between the closing meeting with the bank and the communications of findings is six months. After each on-site inspection, the team in charge of the inspection draws-up an internal report indicating any flaws and weaknesses identified during the inspection. The report itself is not shared with the bank—only the findings and recommendations are communicated. Such communication takes on average six months. Relatively speaking, this period is somewhat long. A period of, say, four months would not be unusual for other regulators. The CSSF has stated that there still can be delays in completing an inspection report in a timely manner, due in part to inadequate staffing levels and staff being diverted to other tasks, but the situation is improving and should improve more with increased staffing levels.

46. The tendency to escalate minor decisions to the most senior executives has been addressed. Only those reports where enforcement action is anticipated—representing about 10 to 15 percent of all inspections—are now referred to the executive committee.

47. No full scope inspections take place. It is advisable to carry out full scope inspections on a risk basis, particularly in the case of small banks which, by virtue of their size, would lend themselves to full inspections. Some banks, because of their size or activities may escape targeted inspections and therefore any inspections. Additionally, some small banks, because of the low interest rate environment and increased administrative costs, are incurring losses.

48. During 2016, ten significant institutions were subject to on-site inspections. Five of these were in banks which are directly supervised by the ECB and five in banks supervised by the ECB as subsidiaries of parents deemed to be SIs. The corresponding figures for 2015 were five and four respectively. For each year, all but one of the inspections were targeted (e.g., credit and counterparty risk, operational risk, interest rate risk in the banking book). The exceptions were follow-up inspections. The frequency of on-site inspections for indirectly supervised banks appears rather low (five per annum out of a cohort of more than 50) particularly when such inspections are targeted.

Recommendations

In keeping with the provisions of Core Principles 8 and 9—Supervisory approach—the following is recommended:

- Continue to recruit additional on-site inspection staff.
- Review adequacy of existing number of banking experts.
- Reduce time frame for the completion of on-site inspection reports and seek to eliminate undue delays in completing reports.
- The frequency of on-site inspections of institutions supervised as subsidiaries of significant parent institutions should be increased.

E. Interconnectedness with Foreign-based Banking Parent Groups

49. The extent of interconnectedness on the part of Luxembourg-based subsidiaries and branches with their foreign-based banking parent groups was one of the main issues identified in the 2011 BCP assessment. It was identified as an issue under two Core Principles—Liquidity risk and Exposures to related parties rated "compliant" and "largely-compliant" respectively. The risks stem mainly from interconnectedness with foreign-based banking groups as the result of parents funding their local affiliates or upstreaming liquidity from their Luxembourg subsidiaries and branches. Luxembourg banks' liquidity risks thus mainly rest with the financial soundness of their groups. During the global financial crisis, some Luxembourg banks experienced severe liquidity difficulties as a consequence of their parents' distress.

50. Intra-group transactions are still a significant feature of Luxembourg banking. However, a number of developments, as well as mitigants introduced by the authorities in recent years, have supported Luxembourg in its stance and helped focus more on the risks involved. In the first instance, the provisions of the EU CRR, which is directly applicable in all EU member states since January 2014, explicitly allow member states to exempt intra-group exposures from the application of the CRR Large Exposures limits (which restricts large exposures to a maximum of 25 percent of capital) provided that the underlying intra-group exposures satisfy the prudential soundness conditions set out in the CRR. The so-called member state option has been exercised, initially by way of CSSF Regulation and subsequently by Luxembourg financial sector law which became effective in July 2015. In practice, almost all EU members allow the waiver or at least do not prohibit its use but some of these would have a stricter regime than that implemented in Luxembourg. The CRR gives the ECB (for Significant Institutions) and the CSSF (for Less Significant Institutions) the power to limit or withdraw the intra-group large exposure exemption if the conditions stated in the law are no longer valid, for instance, in the event of intragroup exposures endangering the financial soundness of Luxembourg credit institutions. Additionally, in its paper of April 2014 on the Supervisory Framework for Measuring and Controlling Large Exposures which becomes effective from 2019, the Basel Committee chose not to include intra-group transactions. Finally, the ECB is the consolidated supervisor for parent companies established in the euro area and exercises the functions of both host and home authority. Therefore, there is no issue of lack of information concerning euro area cross border groups. In addition, for parents established in non-participating member states, the ECB participates in colleges according to the rules specified in the SSM Framework Regulation.

51. The ECB also permits the use of the waiver and promotes its consistent application throughout the euro area. In its Regulation of March 14, 2016[6] on the exercise of options and discretions (ONDs) available in Union law it states (Article 9.3) that the waiver in relation to intra-group exposures shall be allowed in full provided that, inter alia, the credit institution meets consolidated supervisory requirements under the CRR and FICOD or their equivalent standards in third country jurisdictions. While the ECB's OND Regulation does not apply to Luxembourg as the

[6] Available at https://www.bankingsupervision.europa.eu/ecb/legal/pdf/oj_jol_2016_078_r_0011_en_txt.pdf.

waiver is enshrined in Luxembourg primary legislation, it can be noted that supervisory requirements defined in the Luxembourg law are aligned to those defined in the ECB regulation.

52. The advent of the SSM has helped the CSSF in the application of the waiver. Under this new regime the CSSF has much more access to information on the financial soundness of European banking groups with operations in Luxembourg, particularly given that most (77 percent) Luxembourg banking operations have their parent in SSM jurisdictions. The CSSF will obtain similar information, albeit not as in-depth, about parents/groups domiciled outside the euro area through its participation in supervisory colleges of such groups. Information available through the college process provides the CSSF with an assessment of the financial soundness of the parent/group. The external auditor also monitors intra-group exposures as part of its surveillance of large exposures as well as the application of the arm's length principle to such transactions and documents these findings in its yearly Long Form Report.

Box 1. Exemption for Intra-Group Exposures

The exemption for intra-group exposures as a member State is based on the following: member states may, for a transitional period until the entry into force of any legal act following the review in accordance with Article 507 of the CRR, but not after December 31, 2028, fully or partially exempt exposures, including participations or other kinds of holdings, incurred by an institution to its parent undertaking, to other subsidiaries of that parent undertaking or to its own subsidiaries, in so far as those undertakings are covered by the supervision on a consolidated basis to which the institution itself is subject or with equivalent standards in force in a third country. Exposures that do not meet those criteria shall be treated as exposures to a third party. (Article 507 provides that "by 31 December 2015, the Commission shall review and report on the application of Article 400(1) (j) and Article 400(2), including whether the exemptions set out in Article 400(2) is to be discretionary, and shall submit that report to the European Parliament and to the Council, together with a legislative proposal, if appropriate. With respect to the potential elimination of the national discretion under Article 400(2)(c) and its potential application at the Union level, the review shall in particular take into account the efficiency of group risk management while ensuring that sufficient safeguards are in place to ensure financial stability in all member states in which an entity belonging to a group is incorporated." [The 2015 review did not result in any change to the waiver regime.]

53. In response to the events of the global financial crisis and in an effort to exercise more supervisory control over the waiver regime, the Luxembourg authorities introduced a number of safeguards, first by CSSF Circular in 2009, then by CSSF Regulation in 2014 and by law in 2015. Prior to 2014, the CSSF had no specific safeguards except a general consideration relating to the financial soundness of the intra-group counterparties.

54. The new safeguards, applicable from January 1, 2014, are as follows:

- The bank's (intra-group) counterparty must itself be a bank or investment firm, save for the bank's own subsidiaries when they are included in the consolidated supervision of the bank;
- The counterparty's financial situation must not create disproportionate risk for the bank itself;

- The financing of the exposure does not create significant liquidity risk for the bank deriving from asymmetric maturities or currency mismatches;

- There would be no disproportionately negative impact on the bank if a hypothetical resolution process became applicable to the group.

55. By way of elaboration on these requirements, the CSSF has introduced some guidance, including:

- A SREP measurement of 1 or 2[7] in the counterparty is acceptable and will merit a waiver. A 3 rating would trigger a discussion and a 4 rating is unacceptable.

- The CSSF will require a table of mismatches and exchange rates between assets and liabilities of the bank and a description of the policy of the bank regarding these risks (including internal limits and tolerances towards these risks.) It will also require a specific analysis at group level of any potential hurdles to repayment of intra-group exposures in conditions outside of resolution.

- A legal analysis of the regime that would apply to these intra-group claims in the event of resolution of the counterparty and an analysis, where relevant, of the conformity (including at the group level) with MREL/TLAC requirements (with an explanation of how the intra-group claims are treated for these requirements).

56. There is no formal application process to avail of the waiver nor is there a dedicated ongoing surveillance regime for intra-group exposures. A bank proposing to avail of the waiver must notify the ECB (for Significant Institutions) or the CSSF (for Less Significant Institutions) of such and provide a justification for the waiver (showing that all the conditions in the law are met). The bank can exercise the waiver on submitting the letter. The CSSF has withdrawn the waiver on a number of occasions where it became concerned about the financial soundness of the group. It also informed another bank at the licensing stage that it would not be granted a waiver. On surveillance, the ECB/CSSF will be aware of the extent of intra-group exposures through the quarterly large exposures reports but information on maturity profiles remains fragmented under the current reporting regime. The annual SREP exercise provides only ad-hoc information on maturity profiles. Beyond this, current EU reporting requirements do not require the submission of comprehensive maturity mismatch data although the EBA is currently discussing a new liquidity monitoring tool which would include a maturity mismatch dimension.

57. The introduction of the Basel III liquidity requirements is leading to a move away from intra-group exposures. The two ratios in question—the Liquidity Coverage Requirement (LCR) and the Net Stable Funding Requirement (NSFR), and particularly the LCR—have led to a shift in asset

[7] SREP (Supervisory Review and Evaluation Process) is part of the EEA banking supervisory regime designed to ensure that banks have sound risk management process and sufficient levels of capital and liquidity. It uses a 1 to 4 rating system—1 being best and 4 being poorest.

allocation, from interbank and intra-group exposures to high quality liquid assets (e.g., central bank/ sovereign). As evidence of this, the level of intra-group assets for the Luxembourg system as a whole fell from €320 billion to €266 billion between 2014 and 2015, representing a decline from 43.3 percent to 35.9 percent of total assets over the two-year period.

Recommendations

While the various developments and recently introduced safeguards facilitate to a certain extent greater monitoring of intra-group exposures, the underlying risk remains. Accordingly, in the absence of Luxembourg abandoning or curtailing the use of the waiver, the CSSF should consider introducing a specific supervisory regime in respect of intra-group exposures with particular reference to monitoring maturities mismatches. The following are put forward as a suite of recommendations (non-exhaustive) from which the CSSF could apply one or more depending on the circumstances of the bank in question:

- Formalize the approval process and require applicants to await authorization before availing of the use of the waiver. Require the applicant to present a robust case for seeking the waiver and to detail the risk control procedures designed to ensure that such exposures are properly managed and what mitigants are in place.
- Introduce specific limits in respect of maturity and currency transformations.
- Require banks to submit specific details on intra-group exposures, say on a quarterly basis, indicating the maturity profile of such exposures and highlighting where the specific limits were breached in the past quarter.
- Continue to carry out periodic reviews of waivers granted, including during on-site inspections.
- Intensify policy of (a) applying capital add-ons for solvency purposes, particularly where the level of intra-group could be considered excessive and (b) use of power to limit level of exposures and to seek collateral for lending.

Box 2. Investment Funds—Bank Linkages

Linkages between investment funds and banks are an important feature of the international financial system, including in Luxembourg. Given these links, shocks could potentially be transmitted to the banking system domestically and abroad, and to the real economy. This chapter only deals with such linkages as far as they fall under the scope of this technical note on the Luxembourg banking supervisory regime. For a comprehensive view on the linkages between Luxembourg investment funds and banks, please refer to the accompanying Technical Notes on the macroprudential policy framework in Luxembourg and on investment fund regulation and supervision).

Luxembourg's investment funds have experienced impressive growth since the early 2000s. (See the accompanying Technical Note on investment fund regulation and supervision). Assets of investment funds have quadrupled since 2000, of which 80 percent is accounted for by net inflows and 20 percent by valuation gains. Luxembourg's fund industry is the world's second largest (behind only the US) with €3.5 trillion of net assets, about 72 times GDP or about one tenth of total world-wide investment funds' assets. Since the end of 2008, about one-fifth (or €1.16 trillion) of all new net inflows into investments funds worldwide were in Luxembourg's funds, outperforming inflows into other euro area countries' funds.

Investment funds are often initiated by financial institutions which are part of a large banking group. Luxembourg investment funds hold bank deposits of about €110 billion domestically (3.1 percent of investment funds net asset value and 14.5 percent of Luxembourg's banks aggregate balance sheet.) As these deposits are largely held by custodian banks, the funding share for these particular banks is considerably larger, and about the same amount in banks abroad. Funds also have exposure to bank bonds, equity and derivative exposures domestically and abroad.

Depository banks play a key role in the investment fund industry. Depositary banks differ from others in that they are 'liability-driven' rather than 'asset-driven'—they do not search for liabilities to fund asset purchases in the manner of traditional banks. Depository banks of Luxembourg authorized investment funds are all located in Luxembourg and may provide, besides depositary services, administrative, pricing, brokerage, and accounting services to funds. By regulation, depositaries need to be established in the same country as the investment fund. The market for depository banks is concentrated in Luxembourg, with five banks holding 60 percent of investment fund assets under their custody. While they are legally responsible for safe-keeping fund assets and earn fee income commensurate with their value, they also have direct exposures, mainly through deposits, principally operational deposits, and, to a lesser extent, lines of credit. For instance, fund deposits are concentrated in their depository banks, and account for about 50 percent of their liabilities. Such deposits are often lent to the parent. As part of the new liquidity coverage ratio requirement, depository banks in Luxembourg have had to channel fund deposits into eligible high quality liquid assets (HQLA) which has resulted in a decline in the level of assets placed with the parent.

Investment funds hold large bank deposits, estimated at about €220 billion, about half of which are placed in Luxembourg's largest depository banks. Unexpectedly large and sustained redemptions from investors could trigger a withdrawal of these deposits where fund managers wish to avoid selling less liquid assets, with a potentially adverse impact on the banking system. For example, data from the BCL shows that deposits of non-money market investment funds in Luxembourg banks declined by €6.7 billion in Q4 2008 and by another €5 billion in Q1 2009. The Luxembourg authorities state this vulnerability can be overstated given the nature of these deposits (operational deposits), the liability driven nature of custodian banks, where these liabilities are typically placed short-term (mainly overnight) with group sources and the liquidity preference of asset managers in times of stress. As supporting evidence, the authorities referred to the resilience of the system in 2008–2009 and 2011.

Extreme shocks to Luxembourg's investment funds could be transmitted not only to the liabilities of domestic banks but to foreign banks via bond and stock holdings, derivative exposures, loans and deposits. More specifically, as in the case with Luxembourg banks placing significant sums with group banks, such transmissions could impact on group-wide liquidity management. Also, while these intra-group placements are almost all short-term, typically overnight, difficulties at parent level might result in its not being able to repay in accordance with the repayment terms.

F. Corrective and Remedial Powers

58. The 2011 BCP assessment noted that formal corrective actions (e.g., sanctions) were rarely used or used with minimum impact. Also, there was a noticeable tendency to escalate even decisions of minor importance to CSSF's most senior executives, thereby potentially delaying swift corrective action. In practice, the CSSF relied heavily on moral suasion.[8]

59. Since 2011 there has been a number of positive developments. An enforcement committee was established in 2011—its members comprise the executive board and representatives from the supervision and legal departments and AML/CFT interests. It meets monthly to discuss enforcement issues. Arising from this, there has been a sharp increase in the number of enforcement actions across all supervisory areas—banks, investment firms, asset managers, investment funds, financial markets, and audit oversight. In the case of banks, enforcement actions include injunctions against legal persons, referrals to the State Prosecutor, fines on natural and/or legal persons, negative fit and proper outcomes for natural persons. Total fines increased steadily from €331,000 in 2011 to €1,335,000 in 2015.

60. Since the Single Supervisory Mechanism (SSM) entered into operation on November 4, 2014 the ECB took responsibility for the direct supervision of SI's and indirect supervision of LSIs. The ECB has the exclusive power to impose administrative pecuniary penalties on SIs for breaches of directly applicable Union law and breaches of ECB regulations and decisions. The ECB may also request CSSF to open proceedings against a SI for breaches of national law transposing Directives, to impose not pecuniary sanctions or to impose sanctions on natural persons. The ECB is also entrusted with a range of sanction powers to compel SIs to comply with prudential requirements. In particular, the ECB has the power to impose on SIs periodic penalty payments in case of breaches of ECB decisions or regulations or directly or indirectly use the powers available to national competent authorities under national law.

61. The range of remedial tools available to the CSSF has expanded since 2011. This has been achieved through the adoption by Luxembourg of several EU Directives/Regulations. In the first instance, the law of July 23, 2015 transposing the CRD IV expanded the range of administrative penalties and other administrative measures applicable to banks. These include:

- Where the bank has obtained its authorization through false statements or any other irregular means;
- Where the bank fails to notify the CSSF of relevant acquisitions or disposals;
- Where the bank fails to have in place appropriate governance arrangements;
- Where the bank provides incomplete or inaccurate information to the CSSF;

[8] It should be noted that the BCL is not entrusted with sanctioning powers with regard to its supervisory tasks.

- Where the bank is in breach of its AML/CTF obligations.

62. The CRD IV also provides for the imposition of significant monetary fines.

- In the case of a legal person, penalties of up to 10 percent of the total net annual turnover.
- In the case of a natural person, penalties up to €5 million.
- Administrative penalties of up to twice the amounts gained or losses avoided because of the breach where these can be determined.

Recommendation

Where warranted and in keeping with the provisions of Core Principle 11—Corrective actions—the CSSF should impose monetary fines commensurate with the breach in question.

G. Home-host Relationships

63. With regard to Less Significant Institutions, the CSSF is the ultimate consolidating supervisor for four banks/financial holding companies and leads colleges for three banking groups. It is host supervisor for 10 banks (i.e. Less Significant Banks; for banks in Luxembourg which are Significant Institutions, the ECB is the competent authority). Information exchange among EEA supervisory authorities is governed by European legislation—the information customarily provided to host supervisors pertain mainly to the yearly SREP exercise. Also, the consolidated supervisor and the supervisors of subsidiaries and branches exchange information on all risk categories to which the bank is subject. The aim is to take a joint decision on capital and liquidity adequacy. For non-EEA countries, information is exchanged either by college participation or by way of bilateral meetings; this is the case for Switzerland in particular. Luxembourg actively participates in the relevant colleges.

64. The preparation of group resolution plans with other supervisors is underway. The CSSF is in the process of drawing up resolution plans for the three banking groups for which it is lead regulator.

Recommendation

Ensure close interaction with supervisors of parent/group of Luxembourg Less Significant Institutions located outside the euro area.

H. Credit Risk

(i) Sovereign Debt

65. Luxembourg banks have over €60 billion in sovereign debt, defined as exposure to public administrations, out of total assets of €760 billion as at end-December 2015. Table 6 shows the exposures to public administrations by Luxembourg banks in millions of euros**.**

Table 6. Luxembourg: Exposure to Public Administrations by Luxembourg Banks

Country	Millions of Euros (end-2015)
France	9,465
Italy	7,839
Germany	7,772
United States	6,007
Belgium	4,426
Luxembourg	4,115
Spain	3,290
United Kingdom	3,033
Austria	2,670
Netherlands	2,169
Canada	1,750
Japan	1,382
Other	6,806
Total	**60,724**
Source: CSSF	

66. Included in the heading "Other" are the following:

Portugal/Ireland	€1.8 billion
Greece/Cyprus	€0.004 billion
Russia/Ukraine	€0.018 billion

67. The holding of sovereign debt by Luxembourg banks of €60.7 billion at end-2015 represents a decrease of 3.8 percent over the previous year. As a percentage of total assets, the ratio declined from 8.5 percent to 8.0 percent. Geographically, there was a fall in exposures to European countries in favor of a reallocation to governments in third countries, notably the United States and Japan. Nonetheless, most of the sovereign debt relates to euro area countries. Traditionally, Luxembourg banks with excess liquidity arising from their wealth management activities is either lent intra-group, invested in sovereign debt or deposited at the BCL. The significance of sovereign debt for Luxembourg has increased from October 2015, when Luxembourg

banks became subject to Basel III's liquidity coverage ratio. It requires banks to hold high quality liquid assets, essentially central banks deposits and sovereign debt. This resulted in banks reducing their intra-group exposures and increasing their holdings at the BCL and in sovereign debt.

68. Sovereign debt is held by banks across the spectrum, in many cases to meet the liquidity coverage ratio. The spread is uneven, however, with some banks holding greater amounts than others. There are a small number of covered bond banks which specialize in lending to public authorities but these are in decline partly because of losses incurred in respect of certain U.S. municipalities, e.g., Detroit. Such banks are funded by covered bonds and do not take deposits from the public.

69. Currently, 88 percent of sovereign debt is in the form of sovereign bonds and 12 percent by way of loans to states and municipalities. Almost all of the bonds are categorized as "available for sale" for accounting purposes in the banks' books, given the requirement that these high-quality liquid assets be readily available as a liquidity buffer. The sovereign loans are all granted by covered bonds banks.

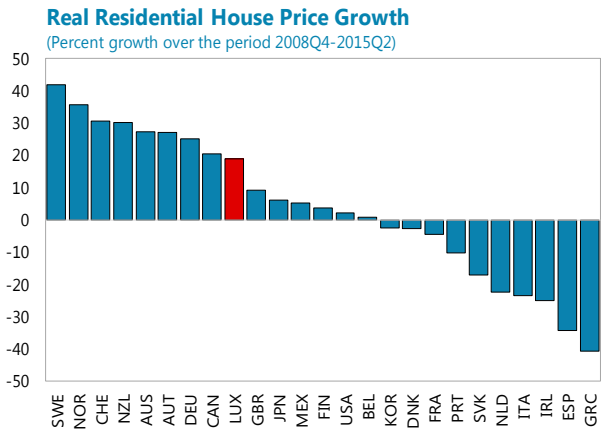
Recommendation

The CSSF should continue to carefully monitor banks' holding of sovereign debt.

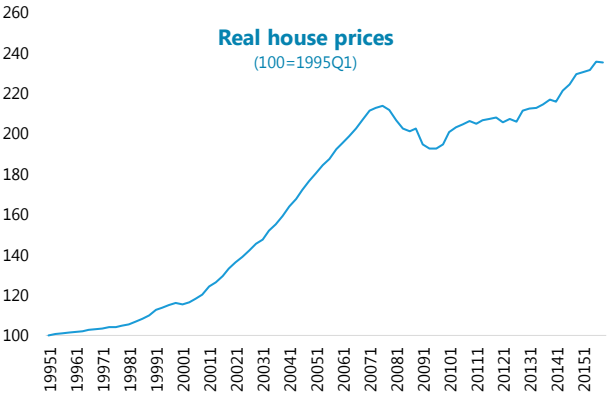
(ii) Residential real estate market

70. The increase in real estate property (mainly residential property) prices is potentially a threat to some banks. The vast majority of real estate lending is concentrated in seven domestically-oriented banks. Mortgage loans represent a considerable share of the assets of some of these banks, particularly in the case of three banks. Residential mortgage loans represent on average 21 percent of these banks' aggregate balance sheet size, ranging from 11 percent to 48 percent of total assets. Also, where up to ten years ago, the proposed buyer was expected to contribute about 20 percent of the value of the real estate, banks are now advancing loans with loan-to-value ratios of greater than 80 percent. At end-December 2015, 25 percent of all outstanding residential mortgage loans had loan-to-value ratios of over 80 percent. However, where such loans are granted additional collateral is generally required. (Further analysis is provided in the Macroprudential Technical Note.)

Figure 1. Luxembourg: Evolution of House Prices (Source – IMF Global Housing Watch)



Source: IMF Global Housing Watch.



Source: BCL.

71. The CSSF has sought to counter any fall-out from an overheated residential real estate market. For example, under Circular 12/552, banks using the standardized approach for credit risk can only apply the preferential risk weight of 35 percent to the parts of their mortgages whose loan-to-value ratio (LTV) is below 80 percent. Above 80 percent, the risk weight increases to 75 percent or higher. The Circular also required banks "to apply a prudent credit granting policy which aims to safeguard their financial stability regardless of the developments in the residential real estate market. This policy shall focus on a healthy ratio between the amount of the credit granted and the value of the securities held (loan-to-value), including the underlying property". Moreover, all major institutions are subject to additional add-ons under Pillar 2 and to the fully phased-in 2.5 percent capital conservation buffer from January 1, 2014. Most of these major institutions are designated D-SIBs.

72. The Systemic Risk Board has recently introduced a recommendation of a risk weight of 15 percent on residential real estate exposures for banks using an internal rating-based approach. It is the view of CSSF that capital requirements for residential mortgages are too low largely even though they reflect the low levels of payment defaults in this area in recent years. It is its belief that internal models would underestimate the capital requirements in adverse circumstances.

73. The CSSF, while conscious of possible risks in this area, believes that there is no immediate threat to banks by the constant rise in property prices, at least in the short term. It tests the resilience of banks' capital on a regular basis to any weaknesses in the housing market. In the current climate, these tests are showing satisfactory results mainly due to the strong capital position of the seven banks in question as well as their relatively conservative credit granting standards. Also, sensitivity analysis shows that an annual default rate of 10 percent and a collateral decline of over 40 percent is needed to bring the weakest banks in the group below regulatory

capital requirements. (This issue is dealt with in greater detail in the stress test Technical Note.) Moreover, in a recent assessment, the European Systemic Risk Board confirmed that appropriate and sufficient measures (e.g., capital surcharges, risk weight floors, and the frontloading of Basel III implementation) have been taken to protect banks against potential risks which might materialize in the residential real estate sector in the medium term.

74. There is a lack of consistency among banks in calculating loan-to-value ratios and debt-to-income ratios. For instance, some banks use net income and others gross income. Accordingly, information submitted to the CSSF in this area is not harmonized and valid comparisons between banks are not always meaningful.

Recommendations

- Continue to monitor residential mortgage lending closely. While currently there does not appear to be an immediate threat of problems in this area, a fall in house prices or, for instance, falling disposable incomes could give rise to issues in the medium term.
- Harmonize information submitted by banks on loan-to-value and debt-to-income ratios.

(iii) Credit Bureau

75. There is no credit bureau in Luxembourg. Credit bureaux/credit registers provide a very useful tool to banks in assessing borrowers' creditworthiness, their level of indebtedness and extent, if any, of default. The BCL is party to an ECB initiative to introduce a harmonized credit bureau across the euro area. The proposed credit bureau is expected to receive its first report in September 2018. Initially it will apply to corporates only with a reporting threshold of €25,000 (€100 for nonperforming loans). Currently, the initiative does not include household debt but it is intended to do so at a later date, possibly in 2020. Including household debt in the initiative would be important for Luxembourg at this point given the increasing levels of residential mortgage indebtedness in households and the prospect of it rising further in the future.

Recommendation

Work closely with the ECB to include households as soon as possible in its initiative and by 2020 if possible.

I. Regulation of Nonbank Holding Companies

76. The CSSF follows EU rules on consolidated supervision. Inter alia, these rules require an EEA jurisdiction with an EU parent institution/EU parent financial or mixed financial holding company in its territory to supervise at the EU parent company level. Where the EU parent is a financial or a mixed financial holding company holding one or more banks within the EEA this entails calculating prudential ratios on a consolidated basis at holding company level as well as for each bank in the group on a solo basis. Where the regulated entities are in different EEA jurisdictions, the regulators who is in charge of exercising supervision will be designated in

accordance with EU rules. In specific cases, the competent authorities may, by common agreement, decide among themselves who will be responsible for consolidated supervision, as also provided by EU rules.

77. The collapse in 2014 of the Espirito Santo group of companies which included Banco Espirito Santo, had a particular resonance for Luxembourg. Further to EU rules and by bilateral agreement with the CSSF, Banco do Portugal was responsible for the supervision of Espirito Santo on both a consolidated and solo basis. In carrying out this function, the Portuguese authorities, while not responsible for the direct supervision of the holding companies which do not require to be authorized under EU law, must satisfy themselves that the group structure of the bank is such as to facilitate effective supervision. Banco Espirito Santo, Portugal's third largest bank, was brought down in mid-2014 by weaknesses at its Luxembourg-based holding companies, at the bank itself and other group entities. The 2015 Article IV consultation noted that Luxembourg indicated that it would propose to use its limited national discretion to tighten some rules domestically while also advocating for improvements at EU level. The 2016 Article IV Report welcomed the Luxembourg authorities' commitment to continue to advocate for the better oversight at European level of nonbanking holding companies that include banks.

78. At domestic level, the CSSF and the Luxembourg Stock Exchange, which it supervises, have tightened some requirements. The Stock Exchange now examines all the documentation of issuers to ensure that none are using names which might indicate that they are part of banking groups or could be construed in any way as having banking connections. It also examines any applicant with the word 'credit' in its title. In the context of the ECB's centralized bank authorization process, the CSSF performs a monitoring to identify banking groups whose structure involves Luxembourg holding companies to ensure that consolidated supervision is performed when required. Apart from this, the CSSF contends that there is little it can do in the absence of an authorization process for banking holding companies. It believes that there are a number of bank holding companies (of non-Luxembourg banks) in Luxembourg but as they are not required to be authorized, it does not have any details.

79. On the EU front two initiatives are underway in this area. In the first instance, the European Commission has recently initiated a public consultation on the evaluation of the Financial Conglomerate Directive. The purpose of the evaluation is to examine whether the current regulatory framework for the consolidated supervisory regime of financial conglomerates is proportionate and fit for purpose. The supervision on a consolidated basis of mixed financial holding companies may be addressed in this context by the European Commission Secondly, a working party under the auspices of the Joint Committee of the European Supervisory Authorities, comprising the EBA, ESMA, and EIOPA is to contribute to the examination of this issue. CSSF is represented on the working party.

Recommendation

In line with the recommendations of the 2016 Article IV Staff Report, the authorities should advocate for stronger oversight at the European level of nonbank holding companies that include banks.

J. Conclusion

80. There have been significant improvements since the last FSAP in 2011. However, the authorities should introduce a governance structure for the CSSF that would remove any potential for interference from the government or industry. The CSSF should continue to strengthen its on-site supervisory regime and also to monitor closely identified vulnerabilities, in particular, risks posed by the high levels of intra-group exposures by Luxembourg subsidiaries to parents and the increasing rise in residential real estate prices.