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ANNUAL REPORT 2017

BANQUE CENTRALE DU LUXEMBOURG

EUROSYSTEM

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MISSION STATEMENT OF THE BCL

The *Banque centrale du Luxembourg* (BCL) is a public institution created by Luxembourg law. The BCL's independance is based on its organic law, the Treaty on the European Union and the Treaty on the Functioning of the European Union. The BCL is a member of the European System of Central Banks (ESCB) composed of the National Central Banks of all 28 EU Member States and the European Central Bank (ECB).

THE MISSION

The Bank is a member of the Eurosystem that consists of the European Central Bank and the National Central Banks of the Member States that have adopted the euro. It takes part in the Single Supervisory Mechanism (SSM). It is in charge of managing the monetary and financial responsibilities granted to it as one of the National Central Banks of the ESCB.

At the national level, the central bank has to carry out the tasks conferred on it by the national laws and conventions.

It is developing the following fields of competence:

- Research and studies and their communication thereof, which aim to prepare, on the one hand, monetary policy decisions and, on the other hand, the development of wider knowledge concerning monetary, financial and economic issues;
- Collection and analysis of statistics in the monetary, financial and balance of payments fields;
- Implementation of monetary policy;
- Organisation and supervision of payment and securities settlement systems;
- Issuance and circulation of banknotes and coins;
- Financial asset management, both on own account and for third parties;
- Participation in the prudential supervision of the financial system and the exercise of the oversight of payment and securities settlement systems, in order to ensure the stability of the financial system in Luxembourg;
- Advisory services to legislative and regulatory authorities in financial and monetary areas.

THE VISION

The BCL intends to become a centre of competence, excellence even, whose performance will generate public confidence in the Central Bank.

Among Luxembourg institutions, the BCL ensures that it is capable of fulfilling all its national, European and international obligations.

In view of the wide variety of its duties and activities, both in the public sector and in a competitive environment, the BCL must generate an income guaranteeing its institutional, functional and financial independence.

CORPORATE VALUES

Consequently, the values associated with its action are:

- Professionalism, guaranteed by highly specialised employees, high-performance tools and a high-level infrastructure;
- Quality in all its services;
- Stability provided by its long term vision of all its activities;
- Objectivity resulting from the establishment of precise rules that are equally applied;
- Integrity, guaranteed by the transparency of its internal operations and with respect to professional ethics;
- A good governance, within and through the governing bodies concerned with the use of the highest standards in governance.

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THE GOVERNOR'S MESSAGE

In 2017, the recovery of the euro area economy accelerated and expanded, and inflation recovered from the previous year. The Eurosystem's accommodative monetary policy contributed to this development, in particular by helping to reduce the cost of credit.

The strengthening of the economy and the inflation outlook have motivated several important decisions by the Governing Council of the European Central Bank (ECB), notably pertaining to the asset purchase programme.

First, in June 2017 the Governing Council deleted the reference to the possibility that policy rates could move further downwards.

Second, in October 2017 the Governing Council decided to reduce monthly purchases under the asset purchase programme from € 60 billion to € 30 billion from January 2018. At the same time, it decided to extend the duration of the programme until September 2018, or beyond if necessary.

Finally, in March 2018 the Governing Council decided to no longer make explicit reference in its communication to the possibility of increasing the size of its acquisitions under the asset purchase programme should the outlook become less favourable. The Governing Council also stressed the importance of a sustainable recovery in inflation.

The Governing Council's conduct of monetary policy has been and will continue to be guided by the principles of persistence, prudence and patience. Thus, the Governing Council also decided to leave the Eurosystem's key rates unchanged and reiterated its position that they should remain unchanged for an extended period of time, well beyond the horizon set for net asset purchases. In line with the Eurosystem's mandate, these decisions were motivated by the Eurosystem's primary objective, i.e. to achieve annual inflation for the euro area as a whole below, but close to, 2% over the medium term.

In October 2017, the European Commission submitted a report to the European Parliament and the Council on the functioning of the Single Supervisory Mechanism (SSM). The report, prepared in accordance with the SSM Regulation and assessing the legislative, institutional and procedural framework of the Mechanism, concluded that the establishment of the SSM had been generally satisfactory. However, for the first time since the establishment of the Mechanism in November 2014, the Governing Council of the ECB declared in 2017 three banks that it directly supervised to be failing or likely to fail, another case having arisen in February 2018.

In particular, the SSM ensures that banks reduce their non-performing loans. As such, the Governing Council of the ECB issued non-binding guidelines to banks in March 2017. Following a public consultation, these guidelines were supplemented by an addendum in March 2018 in order to clarify prudential expectations regarding the provisioning of new non-performing loans.

At the euro area level, the number of credit institutions directly supervised by the ECB decreased slightly from 125 at the end of 2016 to 119 as of 31 December 2017. In Luxembourg, the number was four and thus unchanged from the previous year.

Of the four banks which the ECB considered to be failing or likely to fail, the Single Resolution Board considered that in one case a resolution procedure should be initiated, in the public interest, at the European level. The respective national authorities dealt with the other three cases.

The debate on the establishment of a backstop to strengthen the Single Resolution Fund continued. The European Commission, when publishing its roadmap for the deepening of the Economic and Monetary Union, reiterated that the European Stability Mechanism could provide such a safety net. In addition, the European Commission proposed that the European Stability Mechanism be integrated into the Union's legal framework and transformed into a European Monetary Fund.

As regards the introduction of the future European Deposit Insurance Scheme, differences of opinion between Member States have prevented any significant progress.

Work to establish a Capital Markets Union also continued. Some legislative proposals submitted by the European Commission have been adopted, mainly on securitisation.

On 4 April 2017, the €50 banknote of the new "Europe" series was put into circulation. The €50 denomination of the previous series remains legal tender and will gradually be withdrawn from circulation. The denominations of €100 and €200 of the new series will be put into circulation in 2019.

At the national level, on 11 December 2017 the government tabled draft law 7218 on the adoption of macroprudential measures targeting household borrowers and pertaining to residential mortgages. This draft law consolidates the BCL's leading role in performing analyses and studies to identify systemic risks as early as possible and plans to facilitate the Bank's access to aggregated, i.e. non-granular, data available from state administrations and public institutions. While this is welcome, it is regrettable that the government did not accept the initial proposal of the Systemic Risk Committee to allow the BCL to access granular data. In its opinion of 19 February 2018, the ECB considered that the draft law should provide access to more granular data to the BCL, considering that such access was a necessary condition for the Bank to use its analytical capacity.

In March 2017, the BCL was honoured by the visit of Her Royal Highness the Grand Duchess as part of the presentations given to primary school pupils during the "Money Week" (Woch vun de Suen). During her visit, Her Royal Highness the Grand Duchess attended a workshop during which students from Lycée Vauban tested their knowledge about the security features of euro banknotes and the responsible management of a budget thanks to a game specially developed by the BCL for the occasion. Her Royal Highness the Grand Duchess also interacted with students on money management issues.

In September, His Royal Highness the Grand Duke was welcomed to the ECB by its President, Mr Mario Draghi, for a formal visit. This fruitful visit demonstrated His Royal Highness the Grand Duke's keen interest in the Eurosystem, of which the ECB and the BCL are members.

Mr Roland Weyland was appointed Director of the BCL, with effect from 1 January 2017 for a renewable term of six years. In this capacity, he also became a member of the Bank's Council.

To conclude, I would like to thank, on behalf of the Executive Board, the Bank's staff for their commitment and the quality of their work.

Gaston Reinesch

01 THE BCL'S ACTIVITIES

Zora Palova : *Blue*, BCL Collection

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THE BCL'S ACTIVITIES

1.1 MONETARY POLICY OPERATIONS

In Luxembourg, the *Banque centrale du Luxembourg* (BCL) is responsible for the implementation of monetary policy as defined by the Governing Council of the European Central Bank (ECB) for the euro area as a whole.

The objective of monetary policy is to steer interest rates and manage money market liquidity in order to maintain price stability. As such, the Governing Council decides on conventional measures and, since the financial crisis, on non-conventional measures.

1.1.1 Conventional operations

Conventional monetary policy operations are operations related to the management of the liquidity needs of the banking system. Their operational framework comprises three instruments: open market operations, standing facilities and minimum reserves. Following the increase of the excess liquidity in the Eurosystem since the beginning of the financial crisis, conventional operations have gradually lost importance.

Traditionally, open market operations have three objectives: they play an important role in steering short-term money market rates, managing bank liquidity and signaling the monetary policy stance. Open market operations are conducted in a decentralised manner, through regular and ad hoc tenders, or through bilateral transactions. Open market operations comprise:

– Main Refinancing Operations (MROs): In normal times, these weekly tenders are the primary instrument for refinancing and steering short-term money market rates. Liquidity provided through this channel via reverse transactions are available for a period of one week.
– Longer-Term Refinancing Operations (LTROs), i.e. operations with a maturity longer than one week: In the conventional framework, there is only one form of LTROs having a maturity of 3 months. LTROs are conducted on a monthly basis and, unlike MROs, are not intended to signal the monetary policy stance, but to provide additional longer-term refinancing, regardless of the short-term money market fluctuations.
– Fine-Tuning Operations (FTOs): These operations, which have a variable maturity, make it possible to link the two other refinancing operations. They can be used to mitigate shocks to bank liquidity and, if necessary, to steer the day-to-day evolution of the short-term money market rates. Fine-tuning operations may take various forms: reverse transactions, currency swaps against the euro, or liquidity

absorptions. They can be executed through quick tenders or on the basis of bilateral transactions with counterparties.

- Structural Operations: These operations are carried out in the form of reverse transactions, outright transactions or issuance of ECB debt certificates. Structural operations aim at influencing the amount of liquidity in the banking system over the longer term. In this regard, temporary purchases by the Eurosystem in the form of outright transactions can be used to provide long-term liquidity to the banking system while the issuance of ECB debt certificates intends to create a liquidity shortage in the market if necessary.

Standing facilities are instruments that aim to provide or withdraw overnight liquidity, indicate the general stance of monetary policy and control overnight money market rates. Both standing facilities and open market operations are available to eligible counterparties on their own initiative.

Minimum reserve requirements are an integral part of the operational framework of the Eurosystem's monetary policy. They essentially fulfil two functions: on the one hand, they have a stabilising effect on money market rates because of the application of averaging provision, allowing credit institutions to fulfil the reserve requirements on average over the maintenance period; on the other hand, they aim at increasing the demand for central bank money by creating or increasing a structural liquidity deficit. These two functions facilitate the steering of money market rates by the Eurosystem.

1.1.1.1 Open market operations in 2017

1.1.1.1.1 Main refinancing operations

Since October 2008, weekly MROs have been conducted at the MRO rate through a fixed rate tender procedure with full allotment. This allotment procedure remained applicable throughout 2017 and is intended to be maintained as long as necessary and at least until the end of the last maintenance period of 2019. In 2017, the rate on the main refinancing operations remained unchanged at 0%.

In 2017, the euro area's overall average participation in MROs declined by around 73% compared to 2016. The table below shows the annual change in the average amounts per operation allocated in the euro area since 2008.

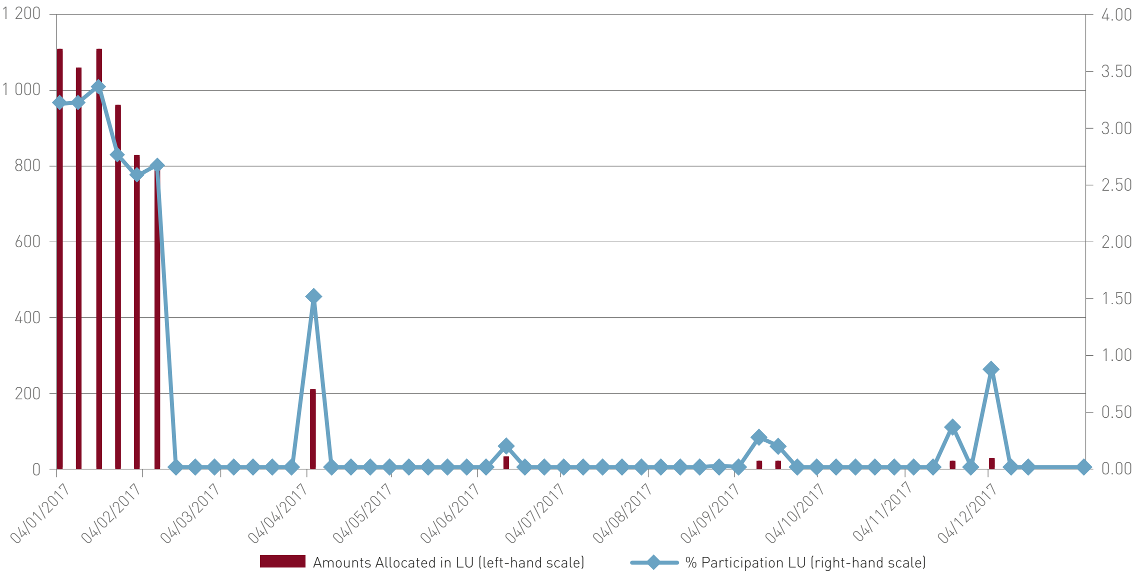
Table 1:
Average amounts per MRO allocated to the euro area as a whole and annual change

Year	Average Amount in millions of euros	Change p.a.
2008	201 113.40	
2009	149 668.23	-25.6%
2010	133 831.09	-10.6%
2011	158 967.96	18.8%
2012	97 829.27	-38.5%
2013	108 040.09	10.4%
2014	110 755.48	2.5%
2015	91 917.46	-17.0%
2016	48 495.08	-47.2%
2017	13 122.23	-72.9%

Source: BCL

In 2017, some Luxembourg counterparties participated more at the beginning of the year with a maximum participation rate of 3% of the total amount allocated in the euro area. Subsequently, only a few one-off participations were recorded.

Graph 1:
MRO - Amounts Allocated and Participation of Luxembourg in 2017
(in € millions)

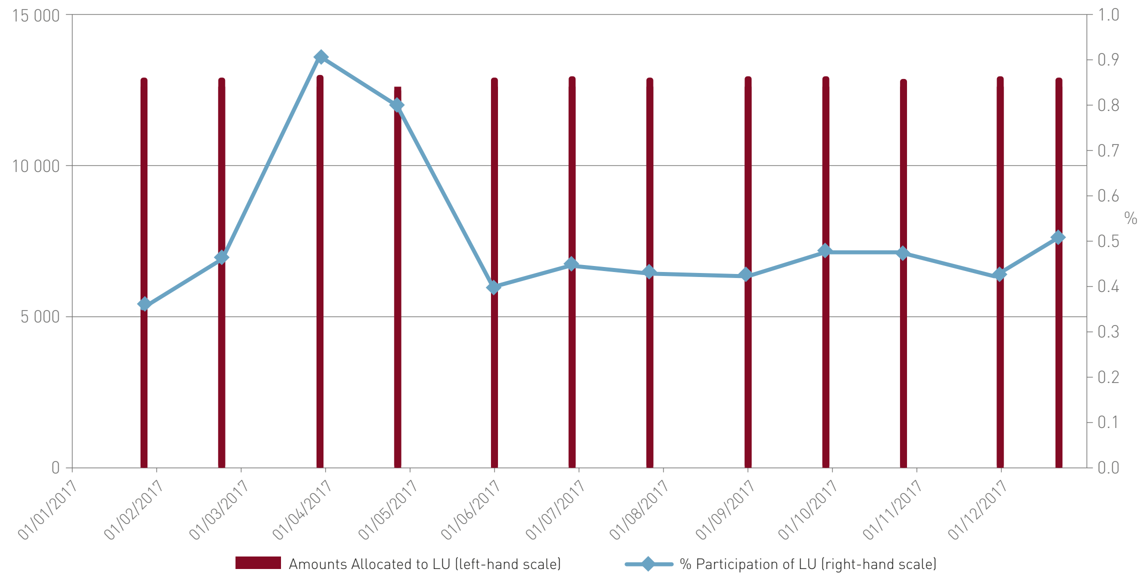


Source: BCL

1.1.1.1.2 Longer-term refinancing operations

One counterparty participated in the three-month LTROs in 2017.

Graph 2:
LTRO-Amounts Allocated to Luxembourg and Participation of LU in the Total of the Euro Area in 2017
(in € millions)



Source: BCL

1.1.1.1.3 Fine-tuning operations

There were no fine-tuning operations in 2017.

1.1.1.2 Standing facilities in 2017

Luxembourg counterparties have the possibility to use the deposit or marginal lending facility provided by the BCL at rates set in advance.

There were no changes in reference rates in 2017. Since 16 March 2016, the deposit facility rate has been -0.40% and the marginal lending facility 0.25%.

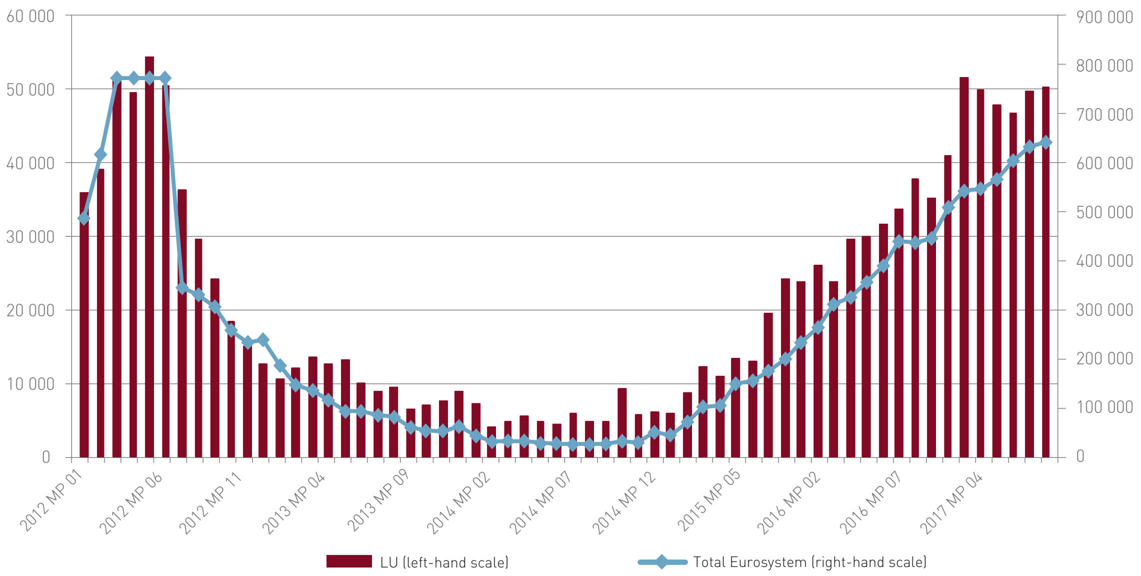
<u>Marginal lending facility</u>

The marginal lending facility was rarely used in 2017. In general, Luxembourg counterparties made use of this facility only on an ad hoc basis.

<u>Deposit facility</u>

Amounts deposited with the BCL continued to grow in 2017, despite the negative interest rate of -0.40% charged by the Eurosystem. This development was due to the increased liquidity surplus and the requirement for banks to comply with the short-term liquidity ratio (LCR) (see paragraphs 1.7.2.1.2 and 3.7 Glossary).

Graph 3:
Evolution of the deposit facility in Luxembourg and the euro area (Average daily amount)
(in € millions)



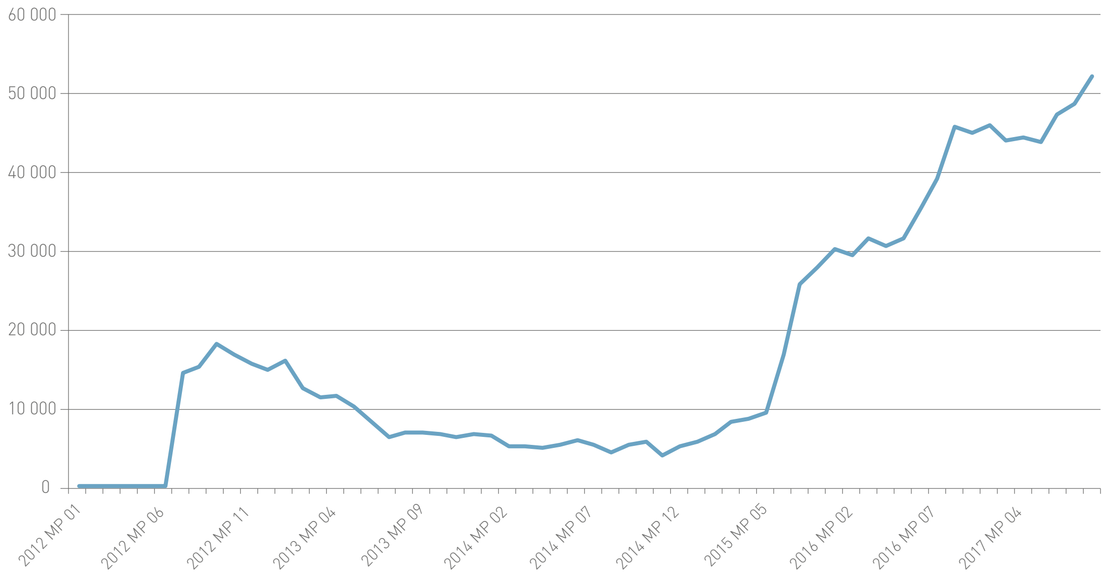
Source: BCL

1.1.1.3 Minimum reserves in 2017

Since January 2012, the reserve requirement ratio has been set at 1% of certain liabilities with a maturity of up to 2 years on the banks' balance sheets.

As the remuneration of the deposit facility became also applicable to the excess reserves since the second half of 2012, counterparties started to be indifferent between leaving their excess liquidity on the current account and using the deposit facility. This led to an increase of excess reserves in the second half of 2012 followed by a gradual decline due to counterparties reallocating their liquidity surplus. However, this trend reversed from 2015 onwards as excess reserves started to rise again. The daily average of excess reserves for all Luxembourg counterparties increased from EUR 13.6 billion in 2015 to EUR 34 billion in 2016 and EUR 46 billion in 2017. This upward development can be explained by the liquidity injected into the market through the Eurosystem asset purchase programme (see paragraph 1.1.2.3) and by the regulatory requirements to comply with the LCR liquidity ratio.

Graph 4:
Total of Daily Average Excess Reserves for Luxemburgish Counterparties since 2012
(in € millions)



Source: ECB

1.1.2 Non-conventional transactions

1.1.2.1 Temporary currency auctions facilities

The Governing Council of the ECB decided in 2014 to continue providing one-week US dollar liquidity to euro area banks beyond 31 July 2014, until further notice. This measure has remained in force since then and throughout 2017.

As in 2016, only a few Luxembourg counterparties participated in the US dollar operations during 2017. At the euro area level, participation also remained low in 2017 with increased demand reported in the year-end operation, in which 21 counterparties borrowed USD 11.9 billion in total.

1.1.2.2 Extension of the maturity of operations

In recent years, the role of targeted longer-term refinancing operations (TLTROs) has become predominant in terms of liquidity provision. Before the crisis, they accounted for about one third of the total liquidity provided by the Eurosystem, whereas today they represent the main portion of liquidity - providing refinancing operations.

On 5 June 2014, the Governing Council of the ECB took measures to support lending to the real economy and to improve the functioning of the monetary policy transmission mechanism. In particular, it decided to conduct, over a two-year period, a series of eight targeted longer-term refinancing operations (TLTRO I) aimed at strengthening bank lending to the non-financial private sector in the euro area, excluding housing loans. These eight operations were conducted from September 2014 to June 2016 and will mature on 26 September 2018. Prepayment options were available after two years according to a pre-established schedule.

On 10 March 2016, the ECB announced a new series of four targeted operations (TLTRO II) to be conducted from June 2016 to March 2017 on a quarterly basis. The four operations have a maturity of four years including the possibility of early repayment after two years. The purpose of these operations is to strengthen the transmission of monetary policy by providing banks with greater incentives to lend to the real economy. There are no mandatory early repayments. Counterparties that have exceeded the reference threshold in terms of lending will be charged an interest rate that could reach as low as the deposit facility rate, which in a context of negative rates represents an additional incentive.

At the end of 2017, liquidity provided to euro area banks via TLTROs accounted for 98% of the total amount of liquidity provided via all refinancing operations.

Table 2 below shows the amounts allocated for the twelve TLTROs carried out from September 2014 to March 2017 in Luxembourg and the euro area.

Table 2:
TLTRO Amounts Allocated in the Euro Area and Part of Luxembourg

		Luxembourg	Euro Zone	%
TLTRO I.1	Sep-14	250	82 602	0.30
TLTRO I.2	Dec-14	141	129 840	0.11
TLTRO I.3	Mar-15	500	97 848	0.51
TLTRO I.4	Jun-15	150	73 789	0.20
TLTRO I.5	Sep-15	-	15 548	-
TLTRO I.6	Dec-15	-	18 304	-
TLTRO I.7	Mar-16	-	7 342	-
TLTRO I.8	Jun-16	-	6 724	-
Total TLTRO I		**1 041**	**431 997**	**0.24**
TLTRO II.1	Jun-16	3 571	399 289	0.89
TLTRO II.2	Sep-16	-	45 270	-
TLTRO II.3	Dec-16	-	62 161	-
TLTRO II.4	Mar-17	1 525	233 474	0.65
Total TLTRO II		**5 096**	**740 193**	**0.69**
GRAND TOTAL		**6 138**	**1 172 191**	**0.52**

Sources: BCL, ECB

After early repayments in 2016 and 2017, the outstanding amount of TLTRO I on 31 December 2017 represented 48% of the amounts initially allocated in Luxembourg and 3% in the euro area. There were no voluntary early repayments under the new TLTRO II series in 2017.

Table 3 provides an overview of all longer-term non-conventional refinancing operations conducted by the ECB since 2007.

Table 3:
Overview of Non-conventional Longer-Term Operations

Type	Number of Operations Executed until End 2017	Allotment of the First Operation	Allotment of the Last Operation	Max Amount Allocated in a Single Operation (in € billion)	Total Amount Allocated in the euro area (in € billion)	Max Number of Bidders in a Single Operation	Motivation (as communicated in ECB Press Releases)
Supple-mentary 3-Month LTRO	24	Aug-07	Dec-09	75	831	146	*Supporting the normalisation of the functioning of the euro money market*
6-Month LTRO	20	Apr-08	Aug-11	50	416	181	*Supporting the normalisation of the functioning of the euro money market*
1-Month LTRO	70	Sep-08	Jul-14	135	2 599	210	*Supporting the normalisation of the functioning of the euro money market*
1-Year LTRO	4	Jun-09	Oct-11	442	671	1,121	*In continuity and consistency with the operations undertaken since October 2008*
3-Year LTRO	2	Dec-11	Feb-12	530	1 019	800	*Enhanced credit support measures to support bank lending and liquidity in the Eurozone money market*
Targeted LTRO	8	Sep-14	Dec-16	130	432	306	*Enhance the functioning of the monetary policy transmission mechanism by supporting bank lending to the real economy*
Targeted LTRO II	4	Jun-16	Mar-17	399	740	514	*Strengthening the transmission of the monetary policy by further incentivising bank lending to the real economy*

Sources: BCL, BCE

1.1.2.3 The Asset Purchase Programme

On 4 September 2014, the Governing Council of the ECB decided to start purchasing securities issued by non-financial institutions from the private sector under a programme of asset-backed securities purchases and a third programme of covered bonds purchases, both to be conducted on the primary and secondary markets. Such purchases aim at improving the transmission of monetary policy and supporting the provision of liquidity to the euro area economy, while promoting the return of the annual inflation rate toward its objective for the euro area as a whole.

On 22 January 2015, the Governing Council extended the scope of asset purchases by announcing a public sector securities purchase programme (PSPP) starting in March 2015. The latter was added to the existing private sector asset purchase programmes in order to address the risks of a prolonged period of low inflation. Purchases, which are conducted on the secondary market, relate to eligible marketable euro-denominated debt securities issued by central governments of the euro area, by certain agencies established in the euro area and by certain international or supranational institutions. Purchases of securities under the PSPP are allocated according to the ECB's adjusted capital key. Additional eligibility criteria were applied for countries subject to an EU-IMF[1] macroeconomic adjustment programme.

On 3 December 2015, the Governing Council decided to add euro-denominated debt securities issued by regional and local authorities located in the euro area to the list of eligible assets for the purchases under the PSPP.

At its meeting on 10 March 2016, the Governing Council decided to introduce an additional programme for the purchase of securities in the corporate sector. This programme targets investment-grade

1 European Union – International Monetary Fund.

euro-denominated bonds issued by non-financial institutions established in the euro area. Purchases under this programme are coordinated by the ECB and conducted by six national central banks on behalf of the Eurosystem. These are the central banks of Belgium, Germany, Spain, France, Italy and Finland. Purchases of corporate bonds have began on 8 June 2016 and are part of the ECB's expanded asset purchase programme (APP), consisting of:

- the third covered bond purchase programme (CBPP3);
- the asset-backed securities purchase programme (ABSPP);
- the public sector purchase programme (PSPP); and
- the corporate sector purchase programme (CSPP).

On 10 March 2016, the Governing Council also decided to increase monthly purchases under the asset purchase programme from € 60 to 80 billion from April 2016 onwards.

On 15 December 2016, the Governing Council adjusted the implementation terms of the ABSPP. From April 2017 on, asset purchases under the ABSPP should be fully implemented by the central banks of Belgium, Germany, Spain, France, Italy and the Netherlands, which now act as asset managers.

On 19 January 2017, the Governing Council announced that it would continue its purchases in the APP at the current monthly pace of € 80 billion until the end of March 2017. Then, from April 2017 onwards, net asset purchases would continue at € 60 billion per month until the end of December 2017, or beyond if necessary, and in any case until the Governing Council observed a sustainable adjustment in inflation according to its target. It was decided that net purchases would include reinvestments of the principal of maturing securities acquired under the APP. Moreover, should the outlook become less favourable or should financial conditions no longer allow further progress towards a sustainable adjustment of inflation developments, the Governing Council emphasised its readiness to increase the volume and/or extend the duration of the programme.

On 27 April 2017, the Governing Council confirmed that purchases would be made at the new monthly pace of € 60 billion until at least the end of December 2017.

Since November 2017, the ECB has published expected monthly redemption amounts for the APP.

On 14 December 2017, the Governing Council decided to continue net purchases under the APP while reducing the monthly pace of purchases to € 30 billion from January 2018 to the end of September 2018, or beyond if necessary.

Table 4:
Amounts Oustanding for the Asset Purchase Programme as of 31 December 2017

Asset-Backed Securities Purchase Programme	Covered Bond Purchase Programme			Public Sector Purchase Programme		Corporate Sector Purchase Programme	TOTAL of securities held for monetary policy purposes (APP)
ABSPP	*CBPP*	*CBPP2*	*CBPP3*	*PSPP-Government Bonds*	*PSPP-Supranationals*	*CSPP*	
25 112	6 069	4 753	241 257	1 690 701	204 452	131 890	2 304 235

Source: ECB

1.1.2.4 Other asset purchase programmes

1) Securities Markets Programme (SMP)

In May 2010, the Governing Council launched an exceptional programme for securities markets.

The aim of this programme was to remedy the malfunctioning of certain segments of the euro area debt securities markets and to restore an appropriate monetary policy transmission mechanism.

The SMP ended in September 2012, following the Governing Council's decision to introduce outright monetary transactions (see below). To offset the impact of these bond purchases, the Eurosystem took specific actions to absorb the liquidity injected through the SMP. These absorption operations ceased in June 2014.

As at 31 December 2017, the outstanding value of cumulated purchases under the securities market programme for the euro area as a whole was around EUR 89 billion.

2) Covered Bond Purchase Programme (CBPP and CBPP2)

Covered bonds are key instruments for the refinancing of credit institutions. This market was particularly affected by the financial crisis. To revitalise it, the Eurosystem had set up two programmes to purchase covered bonds on the primary and secondary markets. The first CBPP, which amounted to EUR 60 billion, started in July 2009 and ended on 30 June 2010. The second CBPP2, initially targeted at EUR 40 billion, started in November 2011 and ended on 31 October 2012. For the second programme, only EUR 16.4 billion were purchased following the improvement in the supply and demand ratio of euro area covered bonds.

As at 31 December 2017, the outstanding value of the cumulative purchases under the CBPP and CBPP2 totaled EUR 10.819 billion.

3) Outright Monetary Transactions (OMT)

The programme for outright monetary transactions (OMT) was announced by the Governing Council on 6 September 2012. The aim of this programme is to preserve the adequate transmission and singleness of monetary policy in the euro area.

These transactions may only be activated to purchase securities from a country that has strictly adhered to the terms and conditions laid down in a programme of the European Financial Stability Fund (EFSF) or the European Stability Mechanism (ESM). Such programmes may take the form of a macroeconomic adjustment programme or a precautionary programme.

If applied, the transactions would focus on the short end of the yield curve, in particular government bonds with a residual maturity of between one and three years.

This programme has not yet been activated.

1.1.3 Management of collateralisation of Eurosystem credit operations

In 2017, the Eurosystem continued its work aimed at enhancing collateral management. This work took amongst others place in the group AMISeCo, in which the Eurosystem in its capacity as catalyst analyses together with market participants dossiers related to collateral mobilisation. AMISeCo documents are published on the ECB's website. Furthermore, in the context of work related to its "Vision 2020", the Eurosystem will reinforce harmonisation of its collateralisation procedures.

List of eligible assets

According to Article 18 of the Statute of the ESCB and the ECB, all Eurosystem credit operations are conducted on the basis of "adequate collateral".

As such, each counterparty provides assets as collateral for its credit operations conducted with a national central bank of the Eurosystem. These assets have to comply with eligibility criteria specified in the Eurosystem's General Documentation on Eurosystem monetary policy instruments and procedures.

The Eurosystem accepts as collateral marketable assets and non-marketable assets, including credit claims. The list of eligible marketable assets is published on the ECB's website.

Eurosystem counterparties use different channels and procedures for the mobilisation of eligible assets. The mobilisation of marketable assets requires the implication of one or more securities settlement systems. Non-marketable assets are mobilised according to procedures developed by each national central bank (domestic mobilisation), or with the intermediation of a correspondent central bank (cross-border mobilisation).

In 2017, there was only one change related to eligible assets. On 13 December 2017, the Governing Council decided to change the collateral eligibility criteria applicable to unsecured bank bonds. The decision is available on the ECB's website.

1.2 FOREIGN EXCHANGE RESERVE MANAGEMENT BY THE BCL

The ECB's foreign exchange reserves have been managed in a decentralised way by the national central banks of the Eurosystem since January 1999. In accordance with the statutes of the Eurosystem and in line with its share in the ECB's capital key, the BCL initially transferred € 74.6 million in foreign exchange assets to the ECB.

The capital allocation key is adjusted every five years on the basis of gross domestic product (GDP) and population. Following Lithuania's adoption of the euro in 2015, the weighting of the BCL in the capital key of the ECB was set at 0.2030% as of 1 January 2016.

On 31 December 2017, the ECB's reserves managed by the BCL corresponded to a market value of 365.3 million euros. One of the objectives of the management of these foreign exchange reserves is to ensure that the ECB has a sufficient amount of liquidity at all times for possible intervention in the foreign exchange markets. Security and liquidity are therefore essential requirements for the management of these reserves.

In the same context, the amount of gold assets, which are actively managed, is determined by the ECB while taking into account strategic considerations as well as market conditions.

1.3 MANAGEMENT OF THE BCL'S ASSETS

1.3.1 Conceptual Framework

1.3.1.1 Objectives of the investment policy

The main objectives of the investment policy are to generate regular income and to ensure positive performance over the long term while taking into consideration capital preservation and stability in the valuation of securities and liquidity. The BCL applies a coordinated, progressive and proactive investment policy, in line with the principle of risk diversification and based on modern portfolio management theory.

The investment approach incorporates:

- an analysis of economies and international financial markets;
- an asset allocation process that involves assessing the returns on different international markets;
- the development of a clearly defined strategy;
- the preservation of the capital value of the assets by following a risk-diversification process and by requiring investment to be a of a specific quality;
- the application of strict risk control measures.

Investment decisions are based on both technical and fundamental analysis. Investment decisions are made taking into account:

- market risk (interest rates, exchange rates, equity prices, commodity prices);
- credit risk (minimum credit ratings criteria by international rating agencies);
- liquidity risk (concentration limits by sector, issuer and issue, with efforts to ensure geographic diversification in the daily management).

1.3.1.2 Performance Measurement

The quality of investment decisions is measured by comparing the performance to external benchmarks which have been developed by large investment banks. This allows performance attribution to be carried out at all decision-making levels (strategic, tactical) as well as in the daily management.

1.3.2 Institutional Structure

Asset management is based on a five-level intervention structure, in addition to risk control:

Level 1: The Council

The Council approves the guidelines of the asset management framework. The Council has thereby allowed the BCL to provide asset management services to third parties and to hold own fund asset portfolios in order to diversify the bank's income. These guidelines also include the risk mitigation framework for asset management.

Level 2: The Executive Board

The Executive Board defines and quantifies the risk management framework. It determines the maximum risk allowance (MRA) which corresponds to the maximum level of risk that can be taken in the management of the assets of the BCL. It specifies risk management measures such as the Value at Risk (VaR) method and the application of stress testing scenarios. The Executive Board also sets warning thresholds, which can lead to the calling of emergency meetings for assessment and evaluation purposes. In addition, the Executive Board sets the limits of the framework annually.

Level 3: The Asset and Liability Management Committee ALCO

ALCO determines the strategic benchmark in accordance with the framework specified annually by the Executive Board by examining the impact of each risk profile (market, credit and liquidity risk) which would result from the proposed investment policies, with respect to both the overall balance sheet and the profit and loss account of the BCL. In the course of the year, ALCO regularly assesses the results of the investment policy.

Level 4: The tactical committees

Tactical committees develop proposals for tactical benchmarks that comply with the permitted deviation relative to the strategic benchmark and monitor the evolution of the portfolios on a short-term basis.

The tactical committees consist of the following:

- the Tactical Investment Committee for the BCL's own funds;
- the Foreign Exchange Committee for the pooled reserves of the ECB;
- the Tactical Investment Committee for the pension fund of the BCL.

Level 5: The Portfolio Management Team

The Portfolio Managers execute transactions, in strict compliance with the limits set, which cover both portfolio and individual investment limits.

1.3.3 Risk Control

The Risk Management unit monitors the positions of all the portfolios in order to assess risks and check compliance with predefined limits. This monitoring is carried out daily and independently from the Front Office. It incorporates traditional portfolio risk measurements such as Value at Risk (VaR) and stress testing.

1.3.4 Structure and Composition of the Portfolios

The bulk of the BCL's own funds are invested in fixed income securities denominated in euro. The strategic orientation enables diversification into other asset categories.

The BCL manages several different types of portfolios.

Investment Portfolio

The investment portfolio consists of assets which represent the own funds of the BCL. The main objective of the euro-denominated portfolio is to maximise the return while taking the abovementioned risk constraints into account (see section 1.3.2). As of 31 December 2017, the total market value (including accrued interest) amounted to € 1 106 million.

In 2017, the portion of fixed income securities with maturities greater than three years increased from 50% to 51% of the portfolio, while the percentage of bonds with a maturity of one to three years remained at 19%. At the end of 2017, the portion of floating rate bonds and fixed-rate securities with a maturity under one year fell from 31% to 30% of the portfolio.

The securities included in this portfolio are broadly diversified, not only geographically but also in terms of sectors and issuers.

Liquidity Portfolio

This portfolio comprises the other assets, largely based on an agreement within the Eurosystem for TARGET2 accounts and other liabilities.

This portfolio also aims to increase the revenue of the bank. The instruments used are mainly short-term fixed-coupon bonds, variable rate bonds and commercial paper, provided that these instruments comply with strict and predefined rating criteria. In the negative short-term interest rate environment, the amount invested in the portfolio has been reduced. As of 31 December 2017, the total market value of the liquidity portfolio (including accrued interest) amounted to € 4 million.

Table 5:
Breakdown of reserves as of 31 December 2017

	Investment Portfolio	Liquidity Portfolio
<1 year	30%	0%
1-3 years	19%	0%
>3 years	51%	100%

Own Reserve Portfolio in Foreign Currencies

The main purpose of the portfolio of own reserves in foreign currencies is to have an intervention portfolio in place in addition to the common foreign exchange reserves transferred to the ECB. The principal objective of this portfolio is to maintain security and liquidity. As of 31 December 2017, the total market value of this portfolio in foreign currency amounted to € 155 million.

Pension Fund Portfolio

The management of this fund is presented in section 2.2.3 of this Annual Report.

ECB Reserve Portfolio

The management of this portfolio is described in section 1.2 of this report.

Third Party Portfolios

The BCL provides non standardised discretionary management services to institutional clients (central banks and international organisations). Furthermore, the Bank acts as one of the Eurosystem's service providers (ESP) which incorporates six central banks within the Eurosystem offering institutional clients (central banks, public authorities and international organisations) a comprehensive range of services for managing euro denominated reserves in a standardized framework as defined by the ECB.

Mr Roland Weyland, Executive Director of the BCL

1.4 BANKNOTES AND COINS

The *Banque centrale du Luxembourg* (BCL), in cooperation with the European Central Bank (ECB) and the other National Central Banks (NCBs) of the Eurosystem, is in charge of putting the euro banknotes and coins into circulation. It participates in maintaining the public's confidence in the common currency by managing the circulation of fiduciary money and fighting against counterfeiting. Through its activities in the field of Luxembourg's numismatics, it contributes to the promotion of the Grand Duchy of Luxembourg.

1.4.1 Production of banknotes and coins

Within the Eurosystem, the euro banknote production is assigned on the basis of a decentralised pooling scenario adopted in 2002. Each NCB is responsible for providing a part of the total banknote requirements. Euro banknotes are produced in accordance with the needs identified by the participating NCBs and aggregated by the ECB.

In this context, in 2017 the BCL was responsible for the production of 14.21 million of € 50 banknotes of the "Europa" series for the Eurosystem's needs (compared to 15.4 million of € 50 banknotes of the "Europa" series in 2016). The BCL allocated the production of these banknotes via a tender procedure. This tender is organised with several other central banks (section 1.4.4. National and international cooperation).

Following an agreement with the State of Luxembourg, the BCL also ensures the production of Luxembourg's euro coins that it puts into circulation. Due to sufficient stocks of euro coins, the BCL has ordered the production of only one million coins of the 2017 series in order to cover the needs of economic agents and numismatists, while the order amounted to 42.5 million coins of the 2016 series in the previous year.

1.4.2 Circulation of banknotes and coins

1.4.2.1 Euro banknotes and coins

1.4.2.1.1 Banknotes

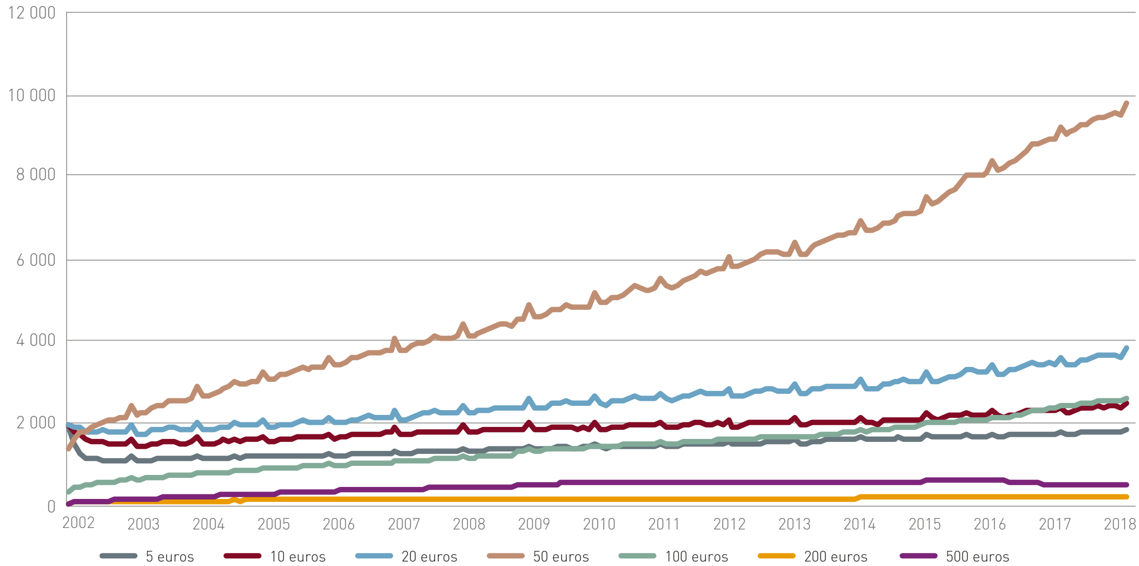
The total number of banknotes issued by the BCL in 2017 amounted to 7.6 million. The number of € 10 and € 20 banknotes deposited at the BCL exceeds the number of banknotes issued. Financial institutions have indeed deposited higher amounts of these banknotes at the BCL than the amount they withdrew. This is explained by the fact that numerous € 10 and € 20 banknotes are brought into the country via tourists and, particularly, by cross-border workers.

As to the denominations of € 100, € 200 and € 500, the demand continued to increase in Luxembourg.

At the European level, the number of € 500 banknotes in circulation diminished after the ECB's announcement in May 2016 of the Eurosystem's decision to stop production of this denomination. This decrease was partially offset by a higher demand for banknotes of € 50, € 100 and € 200. By 31 December 2017, the total number of banknotes put into circulation by the Eurosystem reached 21.4 million, 5.9% more than the previous year.

The graph below illustrates how the circulation of the different denominations has evolved since 2002.

Graph 5:
Evolution of the number of euro banknotes put into circulation by the Eurosystem since 2002
(in millions of notes)

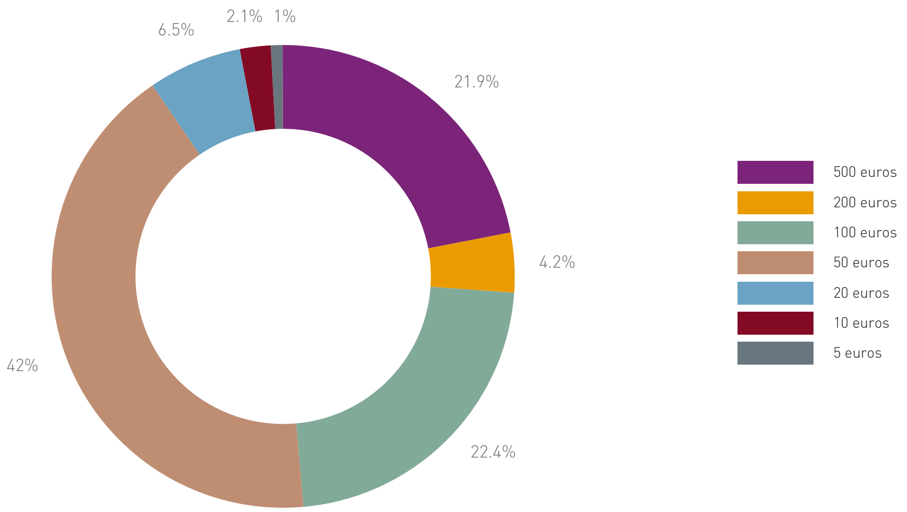


Source: ECB

In value terms, the net issuance of banknotes in Luxembourg grew by € 1.1 million, 1.1% more than the previous year. However, at the European level, the net issuance grew by 44.5 million, which equals a 4% increase. In the euro area, the total amount in circulation reached 1 170.7 million by the end of 2017.

Graph 6 below illustrates the breakdown by denomination.

Graph 6:
Distribution of the value of euro banknotes put into circulation by the Eurosystem on 31 December 2017

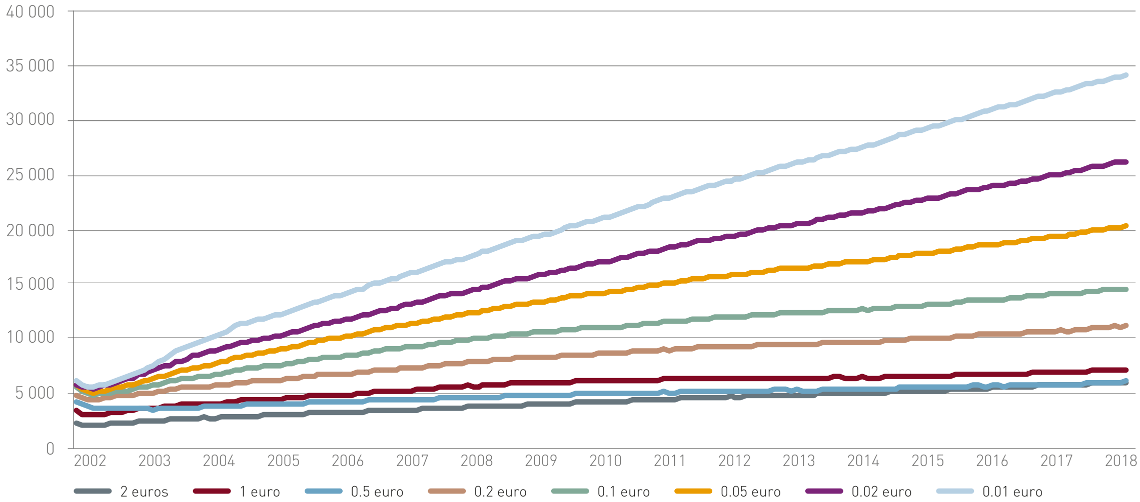


Source: ECB

1.4.2.1.2 Coins

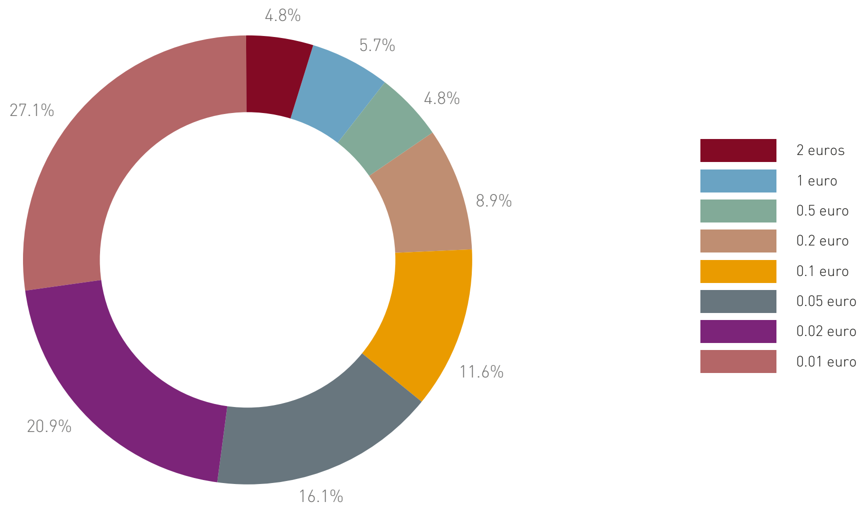
The volume of coins put into circulation in the course of the year 2017 increased by 26 million pieces, which equals a growth rate of 3.3%. At the euro area level, the total number of euro coins in circulation grew by 4.2%, reaching 126 million pieces. The value of euro coins in circulation in the euro area attained € 28 million, a growth rate of 4%. The value of euro coins in circulation in Luxembourg grew by 3.1% compared to 2016.

Graph 7:
Evolution of the number of euro coins put into circulation in the euro area since 2002 (in millions of coins)



Source: ECB

Graph 8:
Breakdown by denomination of the volume of coins in circulation in the euro area on 31 December 2017



Source: ECB

1.4.2.2 Luxembourg franc banknotes

During the year under review, the total value of Luxembourg franc banknotes issued by the Institut Monétaire Luxembourgeois (IML) and not yet presented for exchange, fell from LUF 202.7 million to LUF 202.1 million, a 0.31% decrease. Their total value expressed in euro equals approximately 5 million.

Table 6:
LUF banknotes still in circulation at 31 December 2017

LUF	Number	Value in LUF	Value in EUR
5 000	10 955	54 775 000	1 357 836.78
1 000	68 384	68 384 000	1 695 195.08
100	789 493	78 949 300	1 957 102.03
	868 832	**202 108 300**	**5 010 133.89**

[1 EUR = 40.3399 LUF]

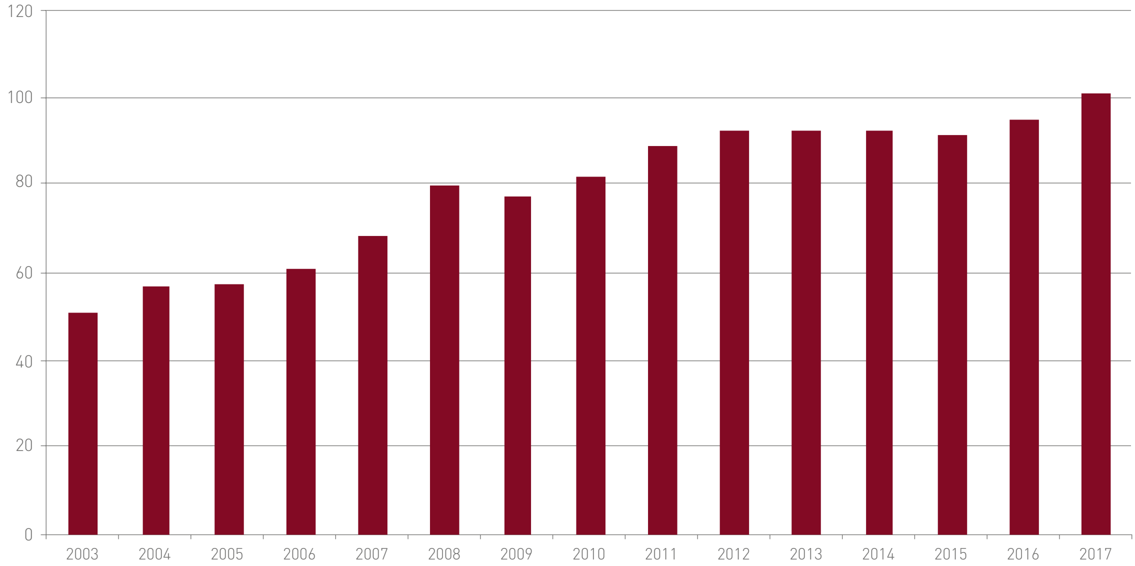
As of end-2004, coins denominated in LUF are neither exchanged nor reimbursed.

1.4.3 Sorting of euro banknotes and coins

The volume of euro banknotes returned by financial institutions to the BCL increased by 6.2% compared to the previous year, from 94.9 to 100.8 million banknotes. Over the past three years, banknote lodgments made at the BCL have steadily increased by exceeding the threshold of 100 million banknotes for the first time in 2017.

The graph below shows the evolution of these lodgments at the BCL since 2003.

Graph 9:
Lodgments of euro banknotes by financial institutions at the BCL (in millions of banknotes)



Source: BCL

The lodged banknotes were processed with the help of banknote sorting machines. These machines are capable of verifying the authenticity and cleanliness of each banknote. In 2017, 16.4 million banknotes of all denominations (10.5 million in 2016) were destroyed because they were unfit for circulation, which amounts to a destruction rate of 17.4%, compared to 10.6% in the previous year. This rate varies significantly depending on denominations processed. It has also been increased in recent years due to the replacement of the first series of banknotes by the introduction of the "Europa" series.

1.4.4 National and international cooperation

In the fight against counterfeiting of euro banknotes and coins, the BCL closely cooperates with the European Central Bank (ECB) and the national authorities in charge. For the analysis of counterfeit and mutilated euro banknotes and coins, the BCL has been collaborating with the Banque de France and the Deutsche Bundesbank since 2002.

The BCL also collaborates with eight other NCBs (the national central banks of Belgium, Cyprus, Estonia, Finland, Ireland, Latvia, Malta, and the Netherlands) in the management and maintenance of the CashSSP application. This application allows not only to manage its banknote and coin stocks and to monitor its sorting activity of fiduciary money, but also to obtain the lodgments and withdrawal announcements of local commercial banks in a safe manner.

For several years, the BCL has also been pooling its share of banknotes to be produced with seven Eurosystem central banks (the central banks of Estonia, Cyprus, Malta, the Netherlands, Slovenia, Slovakia and Finland). The objective of this pooling is to share the resources and experience necessary for monitoring the banknote production.

1.4.5 Issuance of the new "Europa" banknote series

The new "Europa" banknote series, which is based on the theme of "ages and styles in Europe" like the first series, is issued in a progressive manner: The new series' first banknote, the € 5, was put into circulation on 2 May 2013, followed by the € 10 on 23 September 2014 and by the one of € 20 on 25 November 2015. Unveiled to the public on 5 July 2016, the new € 50 banknote was put into circulation on 4 April 2017.

In 2016, the Governing Council of the ECB concluded a review of the denominational structure of the "Europa" series. It decided to stop permanently the production of the € 500 banknote and to exclude it from the "Europe" series. The issuance of the € 500 banknote will be stopped around the end of 2018, when the € 100 and € 200 notes of the "Europa" series are planned to be introduced. The other denominations, from € 5 to € 200, will remain in place. The end of the legal tender status of the first series will be announced in due course. Banknotes of the first series will remain redeemable at the NCBs with no time limit.

New or improved security features have been incorporated in the banknotes of the "Europa" series in order to ensure maximum protection against counterfeiting and to enable the public to quickly distinguish a genuine banknote from a counterfeit.

1.4.6 Numismatic issues

The BCL issues numismatic products on the theme of the Grand Duchy's history and culture. Through its numismatic premises, more than 2 100 sales transactions were completed in 2017. Around 3 600 parcels were sent out, corresponding to sales made through traditional mail or via the Internet shop of the BCL (https://eshop.bcl.lu).

In 2017, the BCL issued the following numismatic products:

- a € 2 commemorative coin dedicated to the 50th anniversary of the volunteering of the Luxembourg army;
- the 2017 Brilliant Uncirculated set comprising all of Luxembourg's euro coins from the 2017 series (including the first 2 euro commemorative coin);
- a second € 2 commemorative coin dedicated to the 200th anniversary of the birth of Grand Duke Guillame III;
- the 2017 PROOF set of ten coins;
- a silver-niobium coin dedicated to the castle of Useldange and constituting the ninth element of the series dedicated to the castles of Luxembourg;
- a silver-Nordic gold coin dedicated to the green tree frog and constituting the ninth element of the series dedicated to fauna and flora in Luxembourg;
- a Nordic-silver gold coin dedicated to the "Grand-Duc Adolphe (Nei Bréck)" bridge and constituting the second element of the series dedicated to remarkable works in Luxembourg.

1.5 STATISTICS

The *Banque centrale du Luxembourg* (BCL) develops, collects, compiles and disseminates a wide range of statistics that enable it to fulfil its legal tasks within the European System of Central Banks (ESCB), the European Systemic Risk Board (ESRB) and at national level. This information is also used by other national institutions such as the National Institute of Statistics and Economic Studies (STATEC) and the Financial Sector Supervisory Commission (CSSF) in the context of their respective missions.

Within the framework of the cooperation agreement between the BCL and STATEC, the production of quarterly financial accounts statistics (with the exception of public sector data) has been carried out by the BCL since March 2013.

Within the framework of a tripartite cooperation agreement between the ECB, the European Stability Mechanism (ESM) and the BCL, the latter undertook to compile macroeconomic aggregates on the basis of accounting data transmitted by the ESM. These statistical data are necessary for the ECB to compile euro area aggregates, as the ESM is considered a resident euro area financial corporation.

During 2014, the People's Bank of China (PBOC) and the BCL signed a Memorandum of Understanding aimed at establishing a cooperation between the two institutions in terms of monitoring, information exchange and evaluation regarding the renminbi market. As part of this agreement, the BCL monitors developments in this market and regularly provides the BPOC with related information.

Since 2012, the BCL has been collecting statistics on payment instruments and transactions. Some of these data are transmitted in aggregated form to the ECB. In particular, the data collected provide information on the use of the various payment instruments in force in Luxembourg and on the use of the various payment channels. Payments made in electronic money are also covered by the collection.

Finally, on the basis of the cooperation agreement in the field of public finance statistics, STATEC and BCL are cooperating to improve information flows between the two institutions.

Statistical developments

ECB Regulation (EU) 2016/1384 of 2 August 2016 amending Regulation (EU) No 1011/2012 (ECB/2012/24) on securities holding statistics (ECB/2016/22) introduced the obligation to collect from resident banking groups. The BCL began preparatory work during 2017 and issued technical instructions in December 2017. Initial reporting is expected for the reference period of September 2018.

In 2017, the BCL also continued its preparations for the AnaCredit data collection, introduced by ECB Regulation (EU) No 2016/867 of 18 May 2016 on the collection of granular credit and credit risk data (ECB/2016/13). This regulation, transposed by BCL circular 2017/40 of 21 April 2017, provides for the implementation of the AnaCredit project in several stages. However, only step 1 is explained, while the following steps will be re-evaluated later. In terms of scope, stage 1 covers only loans granted by credit institutions to legal persons. Phase 1 will begin on September 1, 2018. However, Article 2.2 of the Regulation provides for the transmission of a first set of counterparties' reference data six months before the start of Stage 1.

The BCL publishes a large number of financial sector statistics on its website and provides STATEC with some of the data required under the International Monetary Fund's (IMF) Special Data Dissemination Standard (SDDS).

In 2017, the BCL, in collaboration with the CSSF, participated in the preparation of the Financial Stability Board's shadow banking report, providing all the statistical data required for this exercise.

During 2017, several changes were implemented to meet growing public demand and to improve the information available to users, in particular on securities and direct investment data.

Finally, the BCL continued its efforts to make statistics more accessible and user-friendly, notably by improving its statistical press releases on banking activity in order to provide more detailed information on bank credit developments.

1.6 PAYMENTS AND SECURITY SETTLEMENT SYSTEMS

1.6.1 Vision 2020

Vision 2020 is the Eurosystem's programme for enhancement of European financial market infrastructures. This programme is composed of three big projects, which are:

- the development of a real time settlement service for instant payments (TARGET Instant Payment Settlement Service – TIPS), which will be operational in 2018;
- the consolidation of the real time gross settlement payment system TARGET2 (T2) and TARGET2-Securities (T2S) foreseen for 2021; and
- the development of a collateral management system (Eurosystem Collateral Management System – ECMS) foreseen for 2022.

As a member of the Eurosystem, the *Banque centrale du Luxembourg* (BCL) participates in these three projects and will promote the usage of these infrastructures in Luxembourg.

1.6.2 TARGET2-LU

Since 19 November 2007, the real-time gross settlement system (RTGS) TARGET2 runs on the Single Shared Platform (SSP), operated in common by 25 central banks of the ESCB. Twenty of these central banks are from the Eurosystem.[2]

At end-2017, the Luxembourgish component TARGET2-LU counted 44 direct participants (three more than in 2016), 36 indirect participants (one less than in 2016) and three ancillary systems (one less than in 2016).

Domestic payments

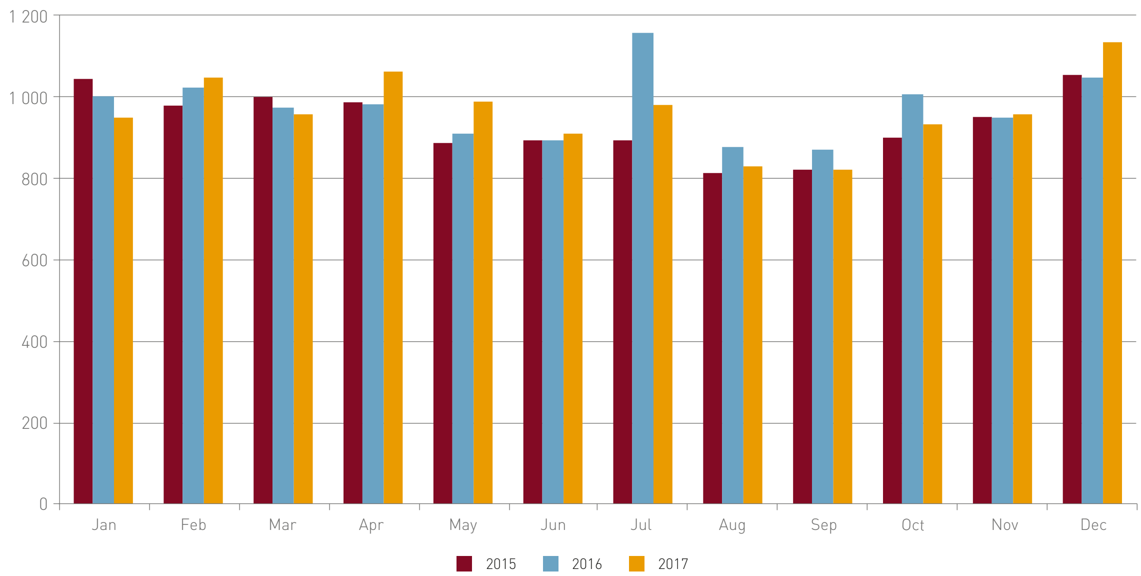
In 2017, participants in TARGET2-LU exchanged a monthly average of 20 419 payments (against 20 802 in 2016) for a value of € 77.5 billion – compared to € 83.2 billion in 2016. Of these payments, 12 694 or 62.2% were retail payments. Their value represented a monthly average of € 6.6 billion or 8.6 % of the domestic value exchanged.

In TARGET2-LU, after the strong decline recorded in 2014 (-12.8%) due to the migration to SEPA[3], volumes stabilised in 2015 (+0.01%), 2016 (+0.05%) and 2017 (-0.02%).

In parallel, the domestic value exchanged decreased by 6.8 % in 2017. This diminuation is due to a slight decrease in interbank payments (-8.2 %) whereas retail payments rose by 10.7 % in the meantime.

Chart 10 illustrates the developments in average daily volumes in domestic payments.

Graph 10:
Domestic payments: average daily volumes



Sources: CRAKS1 / TARGET2

2 The 25 central banks include: the ECB and the 19 NCBs plus five central banks of EU countries which have not (yet) adopted the euro (Bulgaria, Croatia, Denmark, Poland, and Romania).

3 Single Euro Payments Area

Cross border payments

In 2017, participants in TARGET2-LU sent a monthly average of 99 474 payments to other countries of the EU (100 857 payments in 2016), a decrease of 1.4%. The monthly average value of these payments increased by 24.9% to € 821 billion (€ 657 billion in 2016).

The volume of retail payments decreased by 15.3% to reach 43 739 payments, representing 44.0% of total cross border volume. The relative part of retail payments declined by 7.3% in 2017 whereas it declined by 1.5% in 2016. The volume of interbank payments increased by 13.3%, thus reaching a monthly average of 55 735 transactions in 2017, compared to 49 187 in 2016.

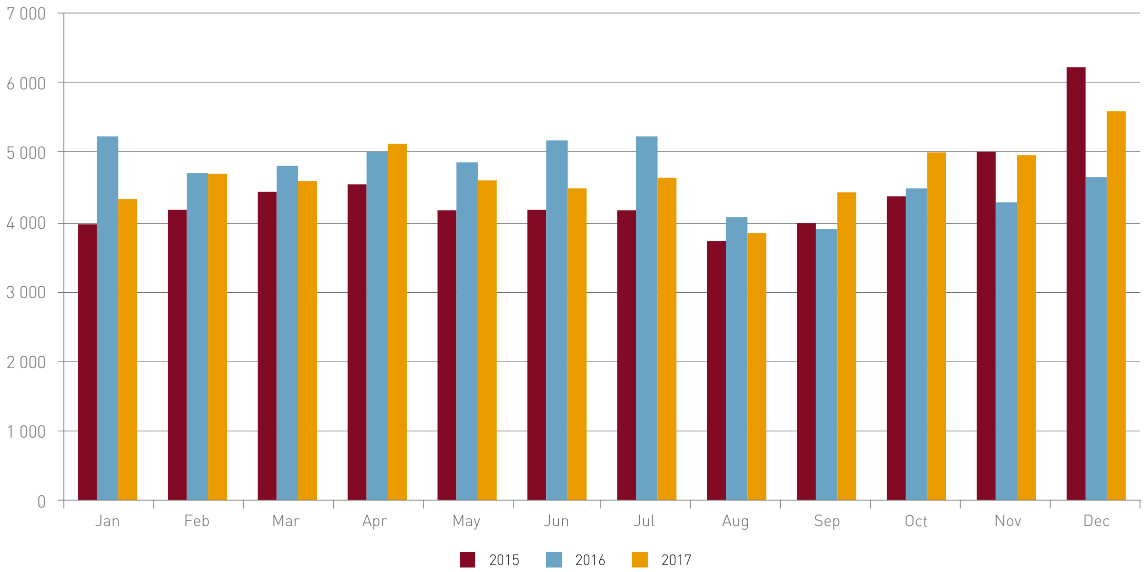
In value terms, the average monthly retail payments increased by 21.0% to an average of € 48.27 billion, representing 5.9% of the total value exchanged. The value of monthly interbank cross border payments increased by 25.1% to € 772.5 billion.

Globally, outward cross border payments[4] decreased by 1.4% in volume and increased by 24.9% in value compared to 2016. The average value per transaction sent was € 8.25 million (against € 6.5 million in 2016). The average value of an interbank payment increased from € 11.4 million in 2015 to € 12.6 million in 2016 and thereafter to € 13.86 million in 2017.

In 2017, participants in TARGET2-LU received 99 127 payments on average per month from abroad[5] against 84 459 in 2016 (+17.4%). Participants issued 120 595 payments on average per month in 2017 compared to 121 995 in 2016 (-1.1%). The average value of incoming payments was € 907.8 billion or 3.1% lower than the value sent (€ 937.2 billion).

Charts 11 and 12 display the development of average daily volumes and values in cross border payments sent by Luxembourg participants.

Graph 11:
Outward cross border payments: average daily volumes

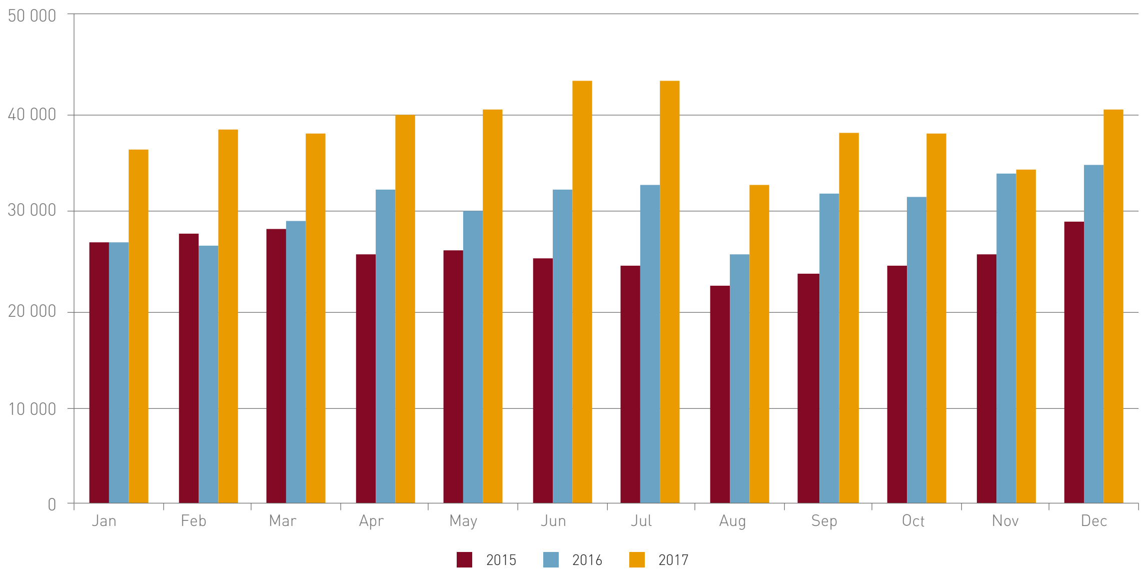


Sources: CRAKS1 / TARGET2

4 From the central bank of Luxembourg to the other 24 participating central banks.

5 "Abroad" refers to the other 24 participating central banks.

Graph 12:
Outward cross border payments: average daily values (in € millions)



Sources: CRAKS1 / TARGET2

Aggregated figures of domestic and cross border payments

The total number of outward payments issued by participants in TARGET2-LU in 2017 amounted to 1 438 717 (versus 1 459 906 in 2016, meaning a yearly decrease by 1.5%). Of these payments, 677 193 or 47.1% were retail payments.

Table 6 provides an overview of average daily volumes of payments over one year since 2014.

The average monthly value of all outward payments in 2017 was € 937.2 billion, of which € 56.8 billion (6.1%) were retail payments. Similar to the previous four years, the value of 81.3% of these payments was below € 250.000.

On average, 68.8% (76.2% in 2016) of the retail payments and 83.8% (83.1% in 2016) of the interbank payments were settled each day before noon. They represented 52.1% and 82.5% of the respective values.

Table 7:
Volumes of outward sent payments in daily averages

	Domestic		Cross border sent		Total sent	Cross border received	
	Volume	% volume sent	Volume	% volume sent	Volume	Volume	% volume sent and received
2014	931	(20.4)	3 639	(79.6)	4 570	2 694	(37.1)
2015	932	(17.5)	4 397	(82.5)	5 329	3 102	(36.8)
2016	973	(17.1)	4 719	(82.9)	5 692	2 968	(34.3)
2017	965	(17.0)	4 701	(83.0)	5 666	3 653	(39.2)
Variation 2016-2017	-0.8%		-0.4%		-0.5%	+23.1%	

Source: BCL

TARGET2-LU compared to other systems participating in TARGET2

All national RTGS systems participating in TARGET2 transferred a monthly average number of 7.43 million payments in 2017, approximately the same number as in the previous year. Luxembourg's portion represented 1.66% of this volume (1.7% in 2016). The average monthly value exchanged amounted to € 36 038 billion (€ 38 301 billion in 2016). Luxembourg's share of the exchanged value was 2.56% (1.9% in 2016).

In 2017, 57% (the previous years 62%) of all payments in the national RTGS system which relied on TARGET 2 were domestic transactions. The part of interbank payments decreased by 6%, to 23%. In TARGET2-LU, domestic payments represented 17.0% (17.1% in 2016) and interbank payments 52.7% of the volume (46.9% in 2016).

The average value of a TARGET2 payment amounted to € 4.8 million in 2017 (€ 5.0 million in 2016). In TARGET2-LU, this value was € 7.49 million (€ 6.1 million in 2016).

The maximum daily number of outward payments in TARGET2 was 534 892 (18 April 2017). In 2016, the maximum amount of transactions was 533 100 (on 30 June 2016). For Luxembourg, the maximum daily amount was reached on 27 December 2017 with 9 357 payments. In 2016, the maximum was reached on 28 July with 10 433 outward payments.

Availability and performance of TARGET2

The availability of the TARGET2 platform, and hence of TARGET2-LU, was 100% in 2017, the same as in 2016. The SSP received a daily average of 370 263 payment instructions, 2.61% more than in 2016. Of all the instructions during 2017, 100% (99.81% in 2016) were settled within five minutes after reception.

1.6.3 Retail payments in Luxembourg

Next to notes and coins, the most used payment instruments in Luxembourg are payment cards, credit transfers and direct debits.[6] Network-based electronic money, which are issued and operated by credit institutions or electronic money institutions, is mainly used for remote payments. As in 2016, new actors in the field of mobile and Internet payments emerged in Luxembourg. Several banks in Luxembourg offer mobile-based person-to-person (P2P) payments. The main card issuers furthermore pursued the issuance of contactless credit cards, now extended to debit cards.

Table 8:
Distribution of payment instruments in Luxembourg (share in number of transactions, %)

	2016	2017
Credit transfers and standing orders	31.04	30.18
Direct debits	8.16	6.19
Debit cards	32.43	33.37
Credit cards	28.26	30.16
Cheques	0.11	0.10
Total	100	100

Source: BCL

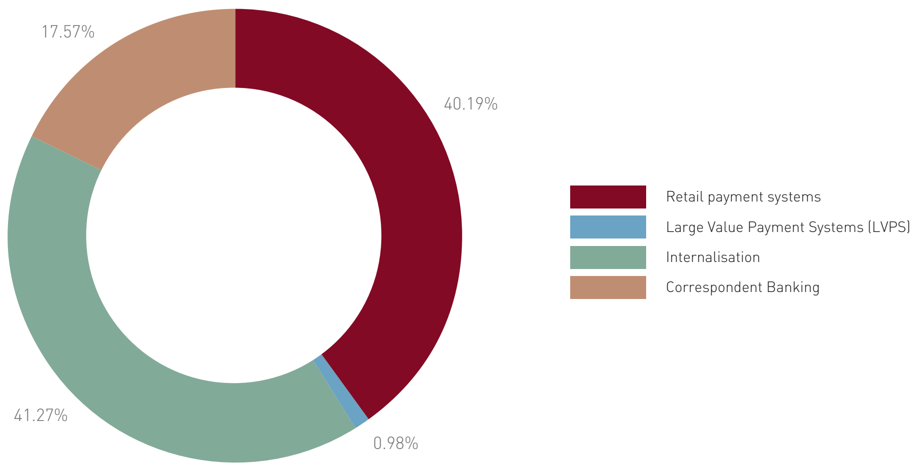
6 Cheques are no longer daily payment instruments; their usage is on the decrease.

Credit transfers and standing orders

Credit transfers can be processed internally in banks, through a payment system or through correspondent banking agreements.

Banks in Luxembourg process the majority of their non-internal credit transfer and standing order transactions (domestic[7] and cross-border) in retail payment systems (please refer to the chart below).

Graph 13:
Share in volume of customer transfers in 2017 Distribution per settlement channel



Source: BCL

The table below provides a summary – in volume and value - of the customer credit transfers and standing orders' activity:

Table 9:

Credit transfers sent	2016[8]	2017	Change (%)
Total volume of customer transfers (in millions of transactions)	73.36	77.76	6
Volume of customer transfers processed for the account of non-MFI customers[9] (in millions of transactions)	71.09	75.83	6.67
Average value of customers transfers[10] (in euro)	3 853	3 645	-5.40

Source: BCL

In 2017, banks in Luxembourg executed 77.76 million credit transfers, of which 75.83 million on request of customers that are not monetary financial institutions.

Transactions settled in retails payment systems (e.g. Step2, Equens) provide a good indicator of the use of credit transfers by households and non-financial corporations. In 2017, the average value of these transfers amounted to € 3 645.

7 A credit transfer or a direct debit is considered to be domestic when both the payer and the payee have their payment account with a Luxembourgish institution.

8 2016 data have been updated following the reception of revised data.

9 MFI stands for Monetary Financial Institution. The non-MFIs category includes corporates and households but also non-monetary investment funds.

10 It refers to the average value of credit transfers processed in the retail systems Step2 and Equens.

Direct debits

SEPA direct debits in Luxemburg are mainly processed in retail payment systems.

Direct debits (SEPA and non-SEPA)

	2016	2017	Change (%)
Volume (in millions of transactions)	19.30	20.26	4.97
Value (in millions euro)	9 896	11 131	12.48

Source: BCL

Payment cards in Luxembourg

Banks and other categories of payment services providers in Luxembourg issue debit and credit cards in international schemes.

The payment cards activity in 2017 and its annual evolution are detailed in the tables below[11].

Number of payment cards issued in Luxembourg

Volume (number of cards)	2016[12]	2017	Change (%)
Debit cards	722 789	769 885	6.52[13]
Credit cards	1 588 605	1 803 833	13.55[14]

Source: BCL

Transactions on cards issued in Luxembourg[15] (issuing activity)

Volume (in millions of transactions)	2016	2017	Change (%)
Debit cards	76.66	85.98	12.16[16]
Credit cards	66.80	77.72	16.35[17]

Value (in billion euros)	2016	2017	Change (%)
Debit cards	5.90	6.56	11.19[18]
Credit cards	6.05	6.91	14.21[19]

Source: BCL

11 Payments transactions and ATM withdrawals.

12 2016 data have been updated following the reception of revised data.

13 This increase is due to the use of both old and new cards.

14 This increase corresponds to the evolution of two financial institutions' activity.

15 Transactions in Luxembourg and abroad.

16 This increase concerns the evolution of some major actors of the financial place.

17 This increase concerns the evolution of mainly one financial institution.

18 This increase concerns the evolution of some major actors of the retail activity in Luxembourg.

19 This increase concerns the evolution of one financial institution.

Transactions in Luxembourg on cards issued in Luxembourg or abroad[20] (acquiring activity)

Volume (in millions of transactions)	2016	2017	Change (%)
Debit cards	55.45	57.34	3.41
Credit cards	23.18	23.46	1.21
Value (in billion euros)	**2016**	**2017**	**Change (%)**
Debit cards	4.22	4.19	-0.71
Credit cards	1.90	1.76	-7.37

Source: BCL

The Single Euro Payments Area (SEPA) and innovations

The SEPA (Single Euro Payments Area) project aims at achieving a single euro payment area in which all scriptural payments are treated without any distinction between national and cross-border transactions. The SEPA migration of credit transfers and direct debits was achieved on the 1 August 2014 in the euro area countries and on 31 October 2016 in the other EU countries.

As there is room for improvement in the implementation of common processes and standards, the ECB established in 2013 the Euro Retail Payments Board (ERPB) with the objective "to contribute to and to facilitate the further development of an integrated, innovative and competitive market for euro retail payments in the EU".[21] Currently the ECB focuses on instant payments, person-to-person mobile payments, contactless payments at the point-of-sales, standardisation of card payment messages between the issuer and the acquirer, electronic invoice presentment and payments, and payment initiation services.[22]

Instant payments enable the beneficiary to make use of the funds within seconds after the payer initiates the payment. The European SEPA instant credit transfer scheme is operational since November 2017.[23] It provides the rules payment services providers have to follow when they send and receive instant credit transfers in euro, within a country or when they are established in different countries in the SEPA area.

In order to support the integrated emergence of SEPA Instant Credit Transfers, the Governing Council of the ECB decided in June 2017 to launch TIPS – the real-time interbank settlement service in central bank money for instant payments – as part of the Eurosystem Vision 2020 programme. TIPS shall start operations in November 2018.

1.6.4 Securities settlement systems

Selection of eligible depositories

For the mobilisation of securities by its counterparties, the Eurosystem has selected eligible securities settlement systems (SSS) operated by central securities depositories (CSDs). In 2017, the Governing Council decided to introduce, as from March 2018, a new eligibility framework for SSSs and links between SSSs. A securities settlement system or a link is eligible if it complies with two eligibility criteria specified by the Eurosystem in its General Documentation on Eurosystem monetary policy instruments and procedures. Eligibility criterion (a) requires that a SSS or a link comply with the requirements set out in Regulation (EU) No 909/2014 of the European Parliament and the Council on improving securities settlement in the European Union and on central securities depositories, and amending Directives 98/26/EC, 2014/65/EU, and Regulation (EU) No 236/2012. Eligibility criterion (b) requires that a SSS or a link comply and with the

20 Activity of Luxembourgish acquirers only. Data on the activity of foreign acquirers in Luxemboourg are not available.

21 The ECB chairs the ERPB. Members represent the supply side (payment providers) and the demand side (users) of the market. National central banks participate in meetings on a rotational basis.

22 The user initiates a payment order with a payment service provider from an account held with another payment service provider. For the legal definition and additional insight, please refer to the second Payments Services Directive (Directive 2015/2366/EU of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC)

23 The European Payments Council manages the SEPA Instant Credit Transfer (SCT Inst) scheme. For more information: https://www.europeanpaymentscouncil.eu

legal and operational requirements specified by the Eurosystem. The new eligibility framework applies also to SSSs and links that were approved under the past eligibility framework.

In Luxembourg, the systems operated by Clearstream Banking S.A. (CBL), VP LUX S.à r.l. (VP LUX), and LuxCSD S.A. (LuxCSD) are eligible for the mobilisation of securities by the Eurosystem's counterparties.

A domestic mobilisation of securities is also possible via the triparty collateral management service operated by CBL. Detailed information on this topic, amongst which the framework for assessment of triparty agents in view of their eligibility for collateralisation of Eurosystem credit operations, is available on the BCL's website.

Cross-border use of securities

Besides using eligible securities held at the national depository, counterparties can receive credit from their national central bank by providing collateral issued in a depository located in another country of the euro area. The Eurosystem foresees two ways of using securities cross-border:

Mr Pierre Beck, Executive Director of the BCL

- the Correspondent Central Banking Model, or
- links established between depositories' securities settlement systems.

1) The Correspondent Central Banking Model

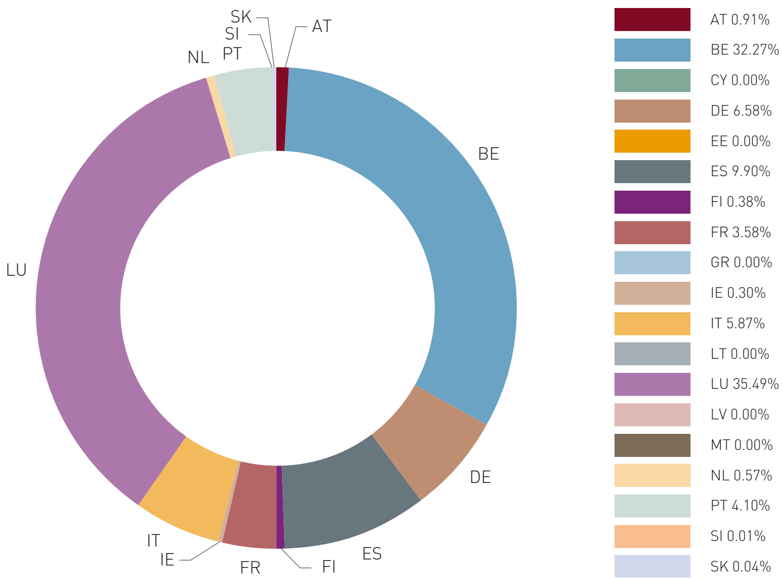
The Correspondent Central Banking Model (CCBM) enables all counterparties of the Eurosystem to use securities on a cross-border basis even if there is no eligible link between the national depository and the foreign depository in which the counterparty holds securities.

In the CCBM each national central bank acts on behalf of the other central banks as a custodian for securities held at the national depository. This procedure involves a central bank called correspondent central bank (CCB), which differs from the central bank granting the credit to the counterparty. The CCB holds the account at the CSD in which the deposited securities are registered. Moreover, the home central bank (HCB) grants the credit to its counterparty based on the confirmations it receives from the CCB.

The CCBM is also used for the cross-border mobilisation of securities via the triparty collateral management services offered by CBL, Clearstream Banking AG, Frankfurt (CBF), Euroclear Bank and Euroclear France.

While in Luxembourg, counterparties use more links than CCBM, at the Eurosystem level, more than half of the cross-border mobilisation of collateral used in the Eurosystem credit operations in 2017 was performed via CCBM. In terms of value, the most active correspondent central banks in 2017 were those of Luxembourg (35,49 %), Belgium (32,27 %), Spain (9,9 %), Germany (6,58 %) and Italy (5,87 %).

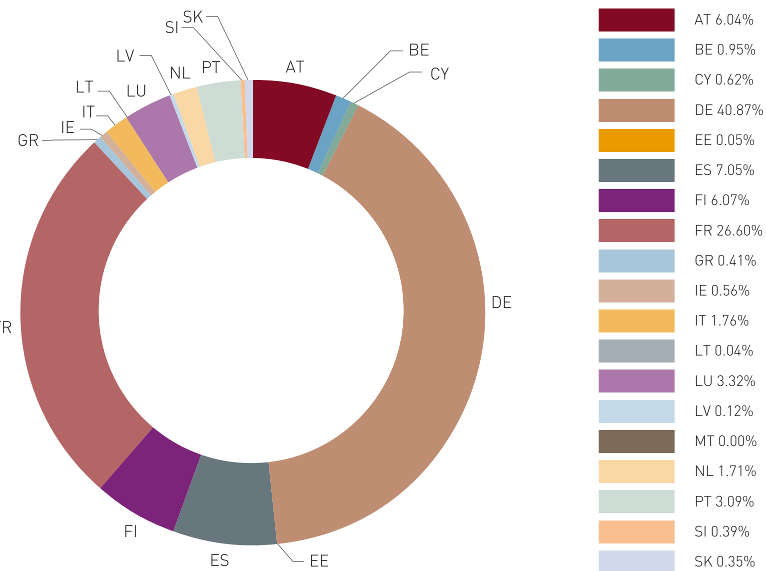
Graph 14:
Correspondent central bank 2017



Source: ECB

The most active home central banks were those of Germany (40,87 %), France (26,6 %), Spain (7,05 %), Finland (6,07 %) and of Austria (6,04 %).

Graph 15:
Home central bank 2017



Source: ECB

2) Links established between securities settlement systems of CSDs

Currently two types of links are eligible, direct links and relayed links:

- in a given securities settlement system located in a country, direct links make securities issued in a system of another country available, thanks to securities accounts that the two systems maintain with each other;
- relayed links enable the transfer of securities between two systems without bilateral relationship by using a third intermediary system.

In 2017, Luxembourg counterparties could use the direct links between CBL and CBF, Euroclear Bank, Monte Titoli (Italy), OeKB (Austria), Euroclear Netherlands, Euroclear Finland, Euroclear France, KDD (Slovenia), BOGS (Greece), CDCP (Slovakia), VP LUX and VP SECURITIES (Denmark), the SSS operated by the National Bank of Belgium, as well as the relayed link between CBL and Maltaclear via CBF. Among these links, Luxembourg counterparties used primarily the links with CBF and Euroclear France. The direct link between LuxCSD and CBF was considered eligible for Eurosystem credit operations.

1.6.5 TARGET2-Securities

TARGET2-Securities (T2S) is a centralised platform delivering harmonised clearing and settlement services to the market. It allows settling domestic and cross borders securities transactions in central bank money, euro or other currencies.

The T2S platform encompasses both the securities accounts managed by the CSDs (Central Securities Depositories) and the dedicated cash account (DCA) hosted by the central banks. The DCAs are used to provide the liquidity necessary to settle the securities purchase transactions on T2S and to receive the cash proceeds resulting from the settlement of transactions. The DCAs are funded by the RTGS account they are associated with. For euro payments, the RTGS account is a TARGET2 account.

The settlement efficiency has been improved on T2S thanks to several mechanisms, including the auto-collateralisation service. This is a credit operation automatically triggered when a participant fails to settle a securities purchase transaction because of a lack of cash on its DCA. In this case, T2S will select automatically eligible collateral, either by mobilising assets available on the participants' securities account (auto-collateralisation "on stock") or by using the very securities that are being purchased (auto-collateralisation "on flow"). T2S will then pledge these securities in favour of the central bank, in exchange of which the participant receives a central bank intraday credit.

The go live of T2S was organised in waves, each of these waves grouping a series of centralised securities depositaries (CSDs). The national central banks have from the first wave onwards been obliged to open DCAs upon request of their participants.

The T2S platform went live in June 2015, as the first migration wave took place. Since then, the BCL has been delivering DCAs to the Luxembourg participants upon request.

In September 2016, the BCL contributed to the migration of one of the two Luxembourg based CSDs participating in T2S and VP Lux, and continued to support the participants who requested to join the T2S platform.

The BCL also prepared the activation of the auto-collateralisation mechanism which is available on request since the fourth migration wave (February 2017), following the migration of LuxCSD, the other Luxembourg CSD participating in the T2S platform.

The following table provides a high level view of the migration date of each CSD:

Table 10:

WAVE 1 22 June 2015	WAVE 1b 31 August 2015	WAVE 2 28 March 2016	WAVE 3 12 September 2016	WAVE 4 6 February 2017	FINAL WAVE 18 September 2017
Bank of Greece Securities Settlement System (BOGS) SIX SIS Ltd (Switzerland) CSD: Depozitarul Central S.A. (Romania) Malta Stock Exchange	Monte Titoli S.p.A. (Italy)	Interbolsa (Portugal) National Bank of Belgium Securities Settlement System (NBB-SSS)	Euroclear ESES (France, Netherlands, Belgium) VP LUX S.à.r.l. (Luxembourg) VP Securities A/S (Denmark)	Clearstream Banking A.G. (Germany) LuxCSD S.A. (Luxembourg) Központi Elszámolóház és Értéektár Zrt. - KELER (Hungary) Österreichische Kontrollbank Aktiengesellschaft (Austria) KDD - Centralna klirinško depotna družba, d.d. (Slovenia) Centrálny depozitár cennych papierov SR, a.s. (Slovakia)	Iberclear - BME Group (Spain) Euroclear Finland Oy 3 Baltic CSDs : LCD - Latvijas Centrālais depozitārjis (Latvia) Lietuvos centrinis vertybinių popierių depozitoriumas (Lithuania) AS Eesti Väärtpaberikeskus (Estonia)

1.6.6 LuxCSD

LuxCSD - Luxembourg's central securities depository - was jointly created in 2010 by the BCL and Clearstream International on the basis of an equal shareholding. It provides securities settlement services in central bank money.

The Clearstream Group is the operator of LuxCSD, allowing it to benefit from operational synergies and a functional IT platform.

LuxCSD provides the following main services:

- the settlement of securities transactions in central bank money;
- the settlement of free of payment transactions;
- direct settlement against Clearstream Banking Luxembourg counterparties or against counterparties in domestic markets;
- securities issuance services with settlement in central bank money or free of payment;
- securities custody services;
- the routing of orders in investment fund shares;
- issuance of LEI[24] (Legal Entity Identifier) for Luxembourg legal entities;
- a national access point to T2S since 6 February 2017.

Securities eligible in LuxCSD are debt securities, equities or investment fund shares, whether they are domiciled in Luxembourg or not.

Luxembourg counterparties can use LuxCSD and its links approved by the Eurosystem in order to collateralise Eurosystem credit operations. In 2017, the Governing Council approved the link between LuxCSD and CBF as eligible for Eurosystem credit operations.

In 2017, LuxCSD started to reorganise its access to other securities settlement systems by using the German system CBF as main access point. This reorganisation will be extended in 2018.

The governance of LuxCSD is performed by an audit committee and by a Board of Directors. The BCL is not active in the governance bodies of LuxCSD.

24 The LEI is a unique and global identifier that permits to unambiguously identify legal entities (other than physical persons) engaged in financial transactions.

1.7 FINANCIAL STABILITY AND PRUDENTIAL SUPERVISION

1.7.1 Macro-prudential supervision

The financial stability mandate attributed to the BCL is based on the Treaty on the Functioning of the European Union (TFEU) – through the central bank's participation in the Eurosystem – and on national legislation.

At the European level, article 127(5) of the TFEU foresees that the European System of Central Banks (ESCB), in addition to its core central tasks, should contribute to 'the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system'.

The EU has adopted new prudential rules (CRD IV and CRR[25]) for the banking system[26]. The rules have been implemented in Luxembourg, notably through the transposition of CRD IV[27]. Since the CRR Regulation is directly applicable, its transposition into national law is not required. Member States have a common legal basis that provides national authorities with several macro-prudential instruments.

At the national level, article 2(6) of the organic law of the BCL foresees that '[…] the Central Bank shall cooperate with the Government and with prudential supervision authorities at the national level, as well as with the other central banks at Community and international level, to contribute to ensuring financial stability, notably within committees set up for this purpose'. In line with the European Systemic Risk Board's (ESRB) Recommendation[28], regarding the macro-prudential mandate of national authorities, the Luxembourgish legislator has adopted the law of 1 April 2015 establishing the national macro-prudential authority, namely the Systemic Risk Committee[29]. Within this Committee, the BCL has a leading role in macro-prudential supervision[30] and is in charge of the Secretariat which falls under the hierarchical authority of the BCL Governor. In this context, the Secretariat is in charge of preparing the Committee's meetings, drafting Recommendations and Opinions as well as conducting macro-prudential analyses required for the decision-making process of the Committee. In addition to its financial stability mandate, due to the role of payment and securities settlement systems within the financial system, the national legislator has entrusted the BCL with the supervision of the payment and securities settlement systems[31].

1.7.1.1 Macro-prudential surveillance in Luxembourg

Although the legal framework establishing the Systemic Risk Committee was adopted in 2015, the BCL has already been involved in the monitoring of systemic risks, i.e. those risks likely to impair the stability of the national financial system as a whole. To this end, the BCL must be able to identify and measure the accumulation of risks over time as well as their distribution within the financial system. Given the importance of the banking system and the investment fund sector, the analyses conducted mainly focus on the risk assessment for these two main components of the national financial system.

In this context, and given the growing importance of the parallel banking system and recent developments of the European regulatory framework, the BCL has already undertaken several analyses in order to assess the degree of interconnectedness between investment funds and the banking sector and to model vulnerabilities which could impact investment funds by using estimated levels of probabilities of default. The temporal dimension of risk is analysed by monitoring indicators such as the credit cycle, asset prices, leverage, maturity mismatches and other specific indicators of liquidity.

25 Capital Requirement Directive (CRD IV) and Capital Requirement Regulation (CRR)

26 See Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms modifying Regulation (EU) No 648/2012 (Regulation CCR) and Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms modifying Directive 2002/87/CE and abrogating Directives 2006/48/CE and 2006/49/CE (Directive CRDIV).

27 Transposed by the Law of 23 July 2015

28 See Recommendation of the ESRB of 22 December 2011 (ESRB/2011/3).

29 In French, Comité du risque systémique (CdRS). See law of 1st April 2015 establishing a Systemic Risk Committe and amending the modified law of 23 December 1998 regarding the monetary status and the Central Bank of Luxembourg.

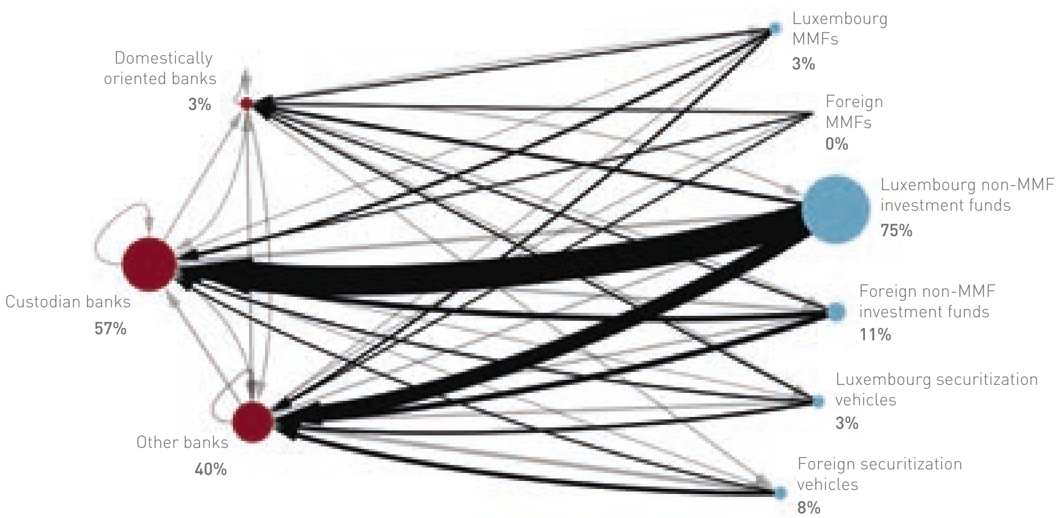
30 See Sub-Recommendation B-3 of the Recommendation of the ESRB on the macro-prudential mandate of national authorities (ESRB/2011/3).

31 Article 2(5) of the organic law of the BCL.

In the 2017 Financial Stability Review, the BCL used a broad set of indicators, including probabilities of default, z scores[32] and a vulnerability index to assess the financial stability of Luxembourg's financial sector. Measures of vulnerability for Undertakings for Collective Investment (UCITS) were also developed in order to assess potential systemic credit risk arising from the interconnections between the different categories of investment funds and via their interactions with the macroeconomic environment. The intersectorial dimension of systemic risk was analysed using several tools which allow for the assessment of the interconnections and the size of linkages between financial institutions.

In order to assess the domestic and cross-border interbank linkages, the BCL's approach relies on network analysis techniques. In 2017, emphasis was placed on assessing the interconnections between the banking sector, particularly custodians banks, and investment funds. The construction of an indicator called the "alpha index" facilitates tracking potential arising from bank and investment fund linkages[33]. The following two graphs depict the approach used by the BCL to assess the importance of the underlying risks due to the potential strengthening of links between the different components of Luxembourg's financial system. Any significant increase in the alpha index is subject to a deeper analysis in order to identify the relevant entities and the underlying reasons for such an increase.

Graph 16:
Network of Luxembourg banks' exposures to domestic and foreign investment funds and securitisation vehicles (nominal exposures, 2017Q3)

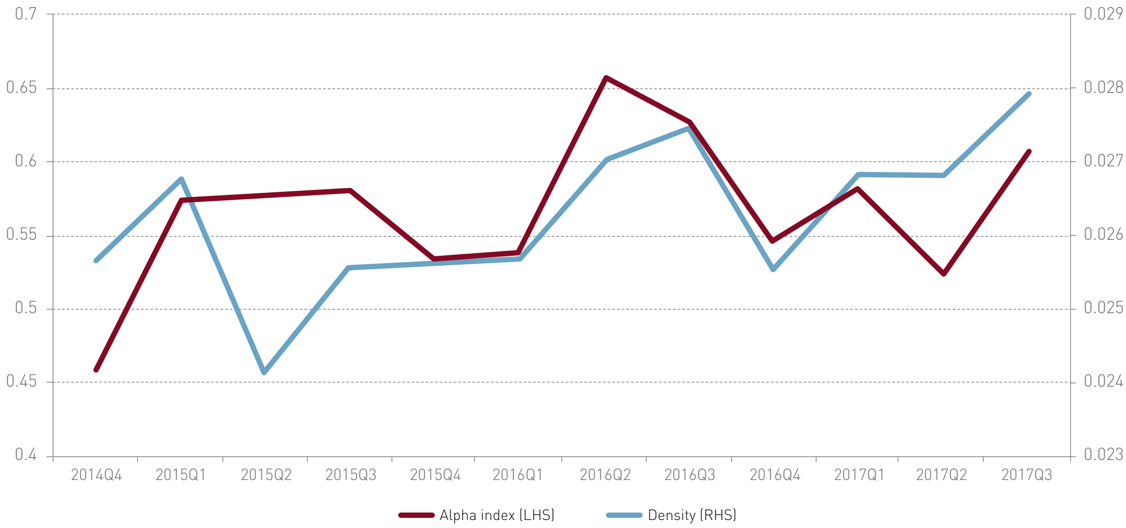


Source: BCL

32 The z score remains an approximation of the index reflecting the distance to the default threshold of a bank or a firm. The fundamental difference between the z score and the distance to default is statistical. This difference lies in the data used to assess the financial soundness of banks (balance sheet vs. market data).

33 The alpha index is a measure of the ratio between the number of fundamental circuits observed in a network to the maximum number possible. Its value ranges from 0 to 1.

Graph 17:
Quarterly dynamics of the alpha index (2014Q4-2017Q3)



Source: BCL

The BCL conducts regular analyses in order to model the linkages between the financial sector and the real economy and continues to develop models for stress testing. The analysis of banks' liquidity in case of shocks is also undertaken. In this context, it may be noted that a number of indicators developed by the BCL take a forward looking approach. In order to anticipate risks of rising vulnerabilities in the banking sector, the BCL monitors the evolution of its synthetic indicator of financial vulnerability and also conducts macro-prudential stress tests.

The BCL continues to closely monitor the evolution of residential real estate prices and the potential vulnerabilities for households or credit institutions, possibly arising from these dynamics. To this end, the BCL has developed an econometric model, integrating supply side and demand side constraints, which facilitates a risk assessment on a quarterly basis. These results have been included in a systemic risk dashboard developed by the BCL. The dashboard incorporates a set of both quantitative and qualitative indicators aimed at detecting potential systemic risks arising within one component of the financial sector and/or within an economic sector relevant for financial stability. Information provided by the dashboard could be used as a tool to assess whether the intermediate objectives of macro-prudential policy are being achieved. The dashboard also includes multiple indicators such as an estimation of Luxembourg's financial cycle and the degree of interconnectedness within the financial sector.

This dashboard has been complemented by a number of specific studies aimed at identifying the emergence of new risks following changes in the regulatory, macroeconomic and financial environment. These analyses were published in 2017 in the form of working papers and in the BCL's Financial Stability Review. The publications address various topics encompassing the analysis of the parallel banking sector based on a general-equilibrium model, the dynamic interconnections between residential real estate prices and mortgage loans, as well as banking profitability in a low interest rate environment.

The BCL used the Basel Committee on Banking Supervision (BCBS) G SIB framework, as well as the guidelines developed by the European Banking Authority (EBA), in order to identify the domestic systemically important institutions in Luxembourg. This framework is based on a series of indicators including certain relevant parameters such as the size of the institution, its level of interconnectedness and the probability that other banks provide similar services in the event of default (i.e. its degree of substitutability). As one of its contributions to the Luxembourg Systemic Risk Committee, the BCL extended the methodology used to identify systemically important institutions in Luxembourg. Drawing on network analysis methods, two new criteria have been included in the methodology in order to account for the interconnections between banks and investment funds.

The BCL is a member of the Regional Consultative Group for Europe of the Financial Stability Board (FSB), the latter being the international body in charge of following and drafting Recommendations for the global financial system. Moreover, with the implementation of the Single Supervisory Mechanism (SSM), the BCL participates in the SSM groups dedicated to crisis management and risk analysis. The BCL also takes an active role in the EBA's standing committee on 'regulation and policy' and in the EBA subgroup on crisis management.

With the entry into force of the SSM, the ECB now has a role in the domain of macro-prudential policy. Although national authorities retain primary responsibility for the implementation of macro-prudential measures, the ECB can – in coordination with those authorities – take additional measures provided in the Council's regulation concerning policies relating to the prudential supervision of credit institutions[34].

Measures available to the ECB include the setting of the capital buffer rates as defined in CRD IV as well as the measures under article 458 of the CRR[35], such as the definition of risk weights targeting asset bubbles in the real estate sector, liquidity requirements, public disclosure requirements, or intra-financial sector exposures limits. Against this background, the Financial Stability Committee (FSC) of the ECB was established in order to assist decision-making bodies fulfil their responsibilities in relation to prudential supervision and financial system stability.

The BCL, in performing its functions for macro-prudential surveillance, contributes to several committees and working groups of the European System of Central Banks (ESCB), such as the FSC and its substructures. These substructures include two subgroups dedicated to macro-prudential analysis and policy. The BCL also takes part in the working group on crisis management and resolution and in the expert groups dealing with legal acts and draft technical standards as well as residential real estate risks and the assessment of the macroprudential policy stance.

The macro-prudential policy framework at the European level still faces some challenges. Harmonising the activation of macroprudential instruments remains necessary in order to facilitate a level playing field. In this context, close cooperation between the ESRB, ECB an national authorities is needed.

1.7.1.2 The European Systemic Risk Board

The European Systemic Risk Board (ESRB) is comprised of more than 70 institutions - including central banks, national and European financial supervisory authorities, the European Commission, etc. - and is composed of both a General Board and a Steering Committee. The technical work is shared between the Advisory Technical Committee (ATC), which consists of experts from the member institutions, and the Advisory Scientific Committee (ASC), which has academic experts amongst its membership.

Within this structure, central banks play a major role in European macro-prudential supervision given their expertise and existing responsibilities in preserving financial stability. The Governor of the BCL is a voting member of the ESRB General Board, which is the unique decision making body of the ESRB. Furthermore, the national micro prudential supervisory authorities also participate at the level of the ESRB General Board, although they do not hold voting rights. The BCL is also represented at the level of the General Board as a liquidity supervisor according to a rotation principle among the other national supervisory authorities. Finally, the BCL shares its financial macro-prudential, monetary and statistical expertise through the participation of its staff members in the analysis and technical work conducted by the ESRB.

The aim of the ESRB is to identify macro-prudential risks at the level of the European financial system as a whole and to issue clear warnings and Recommendations, to addressees. Adherence with these Recommendations is based on a "comply or explain" principle.

The ESRB General Board holds its regular plenary meetings at a minimum frequency of four times per year. In 2017, the ESRB was mainly working on the following topics:

34 See Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions.

35 See footnote 1.

- the identification and assessment of general risks of a systemic nature, followed by discussions on the necessary macro-prudential actions, and the annual review of the ESRB's risk dashboard;

- the continuation of the EU-wide risk assessment of the residential real estate market, the results of which were published in November 2016[36] and following up on the first report carried out in 2015[37]. Based on these reports, the ESRB addressed warnings to eight EU Member states, including Luxembourg, displaying the most significant vulnerabilities. In this context, a draft bill[38] related to macro-prudential measures dealing with residential real estate exposures was introduced in the Chamber of Deputies on 11 December 2017. The ESRB adopted Recommendation ESRB/2016/14[39] which tasks addressees with improving the collection of real estate related data in order to facilitate a better assessment and identification of risks in this sector;

- the improvement of the coordination aspects of the European macro-prudential framework with regard to cross-border effects of macro-prudential measures adopted at national level. For example, Recommendation ESRB/2015/2 "on the assessment of cross-border effects and voluntary reciprocity of macro-prudential policy measures" was amended in 2017 (Recommendation ESRB/2017/4);

- the identification of analytical tools for systemic risk and macro-prudential instruments that the ESRB could develop in the coming years, notably regarding "non-banking"[40] financial activities that are carried out by insurance companies, pension funds, investment funds and "Other financial institutions".

With the implementation of the CRD IV and the CRR[41] on 1st January 2014, the ESRB was called upon to assume the following new responsibilities:

- the establishment of guidance regarding the setting of countercyclical capital buffer rates and the identification of relevant variables to guide both the buildup and release phases of this buffer;

- the development of two reports related to the residential and commercial real estate markets;

- the issuance of Opinions following the notification on certain macro-prudential measures[42]. To this end, an assessment team was established as a substructure of the Advisory Technical Committee in order to assess the macro-prudential measures notified and to prepare the ESRB's Opinions. This assessment team includes nine representatives from central banks among the permanent members which are designated by the General Board.

The BCL contributes to the work carried out by the substructures of the ESRB, particularly through the Advisory Technical Committee and its substructures related to macro-prudential instruments and macro-prudential analysis.

The BCL takes part in various ESRB expert groups on diverse topics such as market liquidity, securities financing transactions and cross border effects of macro-prudential policy and reciprocity. The BCL has also participated in several subgroups, such as the board of editors of macro-prudential commentaries as well as the task forces on stress testing and for the development of a heat map by intermediate objectives.

The involvement of the BCL in macro-prudential supervision has increased considerably following the creation of the ESRB as well as since the establishment of the national Systemic Risk Committee, and especially through its new missions within the Secretariat.

36 ESRB (2016). Vulnerabilities in the EU residential real estate sector.

37 ESRB (2015). ESRB reports on residential and commercial real estate and financial stability in the EU.

38 Draft bill n°7218/06 on macro-prudential measures concerning residential real estate credits and amending the Law of the financial sector and the Law establishing a Systemic Risk Committee

39 ESRB/2016/14 on closing real estate data gaps

40 ESRB (2016). Macroprudential policy beyond banking: an ESRB strategy paper.

41 See footnote 1

42 See article 458 of the CRR and article 133 of the CRD IV.

1.7.1.3 The Secretariat of the Systemic Risk Committee

Following the Recommendation of the ESRB of 22 December 2011, the macro-prudential framework in Luxembourg was established by the adoption of the Law of 1 April 2015[43]. Thus, the Luxembourgish legislator opted for a board-based institutional structure for the macro-prudential authority and, therefore, created a Systemic Risk Committee (the Committee) composed of all national authorities carrying a role in financial stability. The Committee consists of four members, namely (i) the Government, (ii) the Central Bank of Luxembourg (BCL), (iii) the Financial Sector Supervisory Commission[44] (CSSF), and (iv) the Insurance Commission[45] (CAA). The member institutions of the Committee are represented, respectively, by (i) the member of the Government who has the financial center in his duties, (ii) the Director General of the BCL, (iii) the Director General of Financial Sector Supervisory Commission (CSSF), and (iv) the Director of the Insurance Commission (CAA). Four alternate members from these institutions sit on this Committee and replace the members in their absence. The Committee is chaired by the member of the Government and in his absence by the Director General of the BCL.

The collegiate form of the Committee reflects the aim of the Luxembourg law to cover all parts of the domestic financial sector in order to prevent the emergence or mitigate any sources of systemic risk and contagion from one sector to another. Such a holistic view to the financial system is also reflected in the composition of the Committee's Secretariat, which counts among its membership one correspondent per authority represented within the Committee.

As a decision-making body, the Committee relies on its Secretariat, which plays an essential role in the preparation of meetings and the conduct of macro-prudential analyses. Thus, given the expertise of central banks in macro-prudential policy, and in accordance with the role entrusted to it by the ESRB Recommendation[46], the Luxembourguish legislator has attributed the Committee's Secretariat to the BCL, under the hierarchical authority of its Governor.

Thanks to its composition and the expertise of its various departments, the BCL benefits from the identification, evaluation and analytical capabilities with respect to systemic risks that are likely to emerge in the main components of the national financial system. Moreover, the Secretariat focuses on strengthening cooperation and the exchange of information between the Committee's members.

In this perspective, the Committee decided to set up two working groups to better understand and quantify the risks associated with the parallel banking system. The first group entitled "Parallel Banking - Other Financial Institutions" is chaired by the BCL and aims at improving the collection of data on these institutions in order to clarify their activities and associated risks. Within the framework of its work dealing with the parallel banking sector, this group published a study[47] entitled "*Analysis on the shadow banking content of captive financial companies in Luxembourg*" in April 2017. This study notably reveals that parallel banking activities carried out by the "Other Financial Institutions", within the meaning of the narrow definition[48] of the Financial Stability Committee, are very limited. The second group, namely the "Parallel Banking - Interconnections between the investment fund sector and the financial sector", chaired by the CSSF and with contributions from the BCL. The group undertakes analyses on the risks of contagion between investment funds and credit institutions.

In accordance with its prerogatives, the Committee adopted in 2017 a number of Recommendations in order to comply with the legal requirements and to reinforce the resilience of the national financial system. Therefore, the Committee adopted and issued the following Recommendations and Opinion:

43 See law of 1st April 2015 establishing a Systemic Risk Committe and amending the modified law of 23 December 1998 regarding the monetary status and the Central Bank of Luxembourg

44 In French, Commission de surveillance du secteur financier.

45 In French, Commissariat aux assurances.

46 See Recommendation B-3 of the Recommendation of the ESRB of 22 December 2011 on the macro-prudential mandate of national authorities to Member States (ESRB/2011/3).

47 http://www.bcl.lu/fr/stabilite_surveillance/CRS/Shadow-banking_CRS-report.pdf

48 The narrow definition of the Shadow Banking Sector proposed by the Financial Stability Committee includes the Other Financial Institutions, which (i) take part in credit intermediation, (ii) are not subject to banking regulation or to similar financial supervision and (iii) whose activities imply banking risks such as maturity and/or liquidity transformation and the use of leverage.

- Recommendations (CRS/2017/001), (CRS/2017/002), (CRS/2017/003) and (CRS/2017/004) on the setting of the countercyclical capital buffer rates, respectively for the first, second, third and fourth quarters of 2017; and

- Opinion (CRS/2017/005) on the annual designation and re-examination of capital buffers for other systemically important institutions

1.7.2 Micro-prudential supervision

1.7.2.1 Liquidity supervision

The mission to supervise the liquidity of market operators was entrusted to the BCL through an amendment made to its Organic Law[49] by the Law of 24 October 2008[50]. The main purpose of supervising market operators' liquidity is to assess the liquidity situation and liquidity risk management of individual market operators. As shortcomings in the management of liquidity risk by certain operators were one of the main causes of the financial turmoil in 2008, liquidity management and liquidity risk management have been a subject of particular attention by supervisory authorities at international level in recent years.

Liquidity regulation is also important for a central bank because, on the one hand, it acts as a liquidity provider to the financial system in normal times and in times of crisis and, on the other hand, it can detect or even prevent a sequence of market failures, thus limiting systemic risk.

The mission to supervise liquidity is also an essential support function for financial stability and systemic risk analysis and aims in particular to analyse the interconnection between the various market operators and the risks of contagion. The liquidity supervision function of market operators is thus an important provider of data and information for financial stability.

The liquidity supervision function is carried out mainly with regard to credit institutions, which are the counterparties of the BCL in monetary policy operations. This supervision has been conducted under the Single Supervisory Mechanism (SSM) since 2014.

1.7.2.1.1 Liquidity risk supervision of credit institutions established in Luxembourg in the context of the Single Supervisory Mechanism

As part of the implementation of the Banking Union and the establishment of the SSM, the ECB has assumed responsibility for the supervision of all euro area banks since 4 November 2014.

This supervision is carried out directly by the ECB for banks and banking groups considered "significant", including their subsidiaries and branches, while it is entrusted to the national competent authorities for "less significant" banks, under the ultimate responsibility of the ECB.

The main criteria used in the SSM Regulation [51] to define the importance of a bank apply at the highest level of consolidation and are:

- the size (total assets worth more than € 30 billion);

- the importance to the economy of the EU or a participating Member State (a total value of assets exceeding 20% of the gross domestic product (GDP) of the participating Member State, unless the total value of assets is less than € 5 billion), and

- the importance of the institution's cross-border activities.

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49 The amended law of 23 December 1998 concerning the monetary status and the *Banque centrale du Luxembourg*

50 The law of 24 October 2008 improving the legislative framework of the Luxembourg financial centre.

51 Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions

The day-to-day supervision of "significant" credit institutions is conducted by Joint Supervisory Teams (JSTs), comprising staff from ECB and competent authorities, including national central banks.

The BCL participates in the JSTs of significant banks established in Luxembourg, as well as in some JSTs of significant banks established in other euro area Member States with subsidiaries in Luxembourg, to contribute to the supervision of liquidity risk. In this context, the supervision of liquidity risk is conducted on the basis of common methodologies and standards jointly developed by the ECB, competent authorities and national central banks of the SSM. As less significant banks are supervised directly by the national authorities, the BCL continues to supervise liquidity risk of banks established in Luxembourg, in cooperation with the Commission de surveillance du secteur financier (CSSF).

Within the JSTs, as well as in the context of the supervision of less significant banks, the BCL actively contributes to the annual liquidity risk assessments of banks conducted as part of the Supervisory Review and Evaluation Process (SREP), in order to determine the adequacy of their liquidity risk management and liquidity resources. In this context, on-site meetings and an on-site inspections according to a predefined SSM methodology were conducted in 2017 to gain a more detailed understanding of the liquidity risk management framework of these banks. Furthermore, the BCL performs recurring tasks such as controlling the prudential liquidity reportings and monitoring the liquidity situation of banks.

In addition to the liquidity supervision tasks, the BCL is also represented, jointly with the CSSF, on the Supervisory Board, which plans and carries out the SSM's supervisory tasks and proposes draft decisions for adoption by the Governing Council. In this context, an interdepartmental coordination unit has been set up at the BCL. In close cooperation with the CSSF, this SSM coordination unit monitors all the cases and draft decisions submitted to the Supervisory Board and the Governing Council. In 2017, the coordination unit processed more than 1,800 written procedures submitted for decision and prepared the meetings of the Supervisory Board, which generally meets twice a month.

Within the framework of the SSM, the BCL also participates in the work of various groups and committees set up at the ECB level. These groups and committees assist the Supervisory Board in its decision-making.

1.7.2.1.2 Tools for liquidity supervision

In addition to the supervisory work carried out within the SSM framework, the BCL constantly monitors market operators at the local level. This monitoring is based on regular analysis of qualitative and quantitative information at the level of individual operators and at an aggregate level. In order to monitor the liquidity situation of market operators on a daily basis, the BCL has set up a daily reporting on the liquidity situation of credit institutions. This reporting, introduced in 2010, applies to a sample of credit institutions and enables the BCL to assess the liquidity situation of these institutions on a day-to-day basis. This reporting mainly concerns large credit institutions as well as credit institutions that act as counterparties in monetary policy.

Based on a database containing the historical data included in the daily liquidity reporting, the BCL developed an analysis tool that enables to assess the short-term liquidity situation of credit institutions and changes in the liquidity situation over time on an individual basis. Meanwhile, the BCL has developed an analysis tool to assess the liquidity vulnerabilities of individual credit institutions and to identify liquidity risks at an aggregate level. This tool was supplemented by the development of a checklist identifying all credit institutions that experienced a deterioration of their situation beyond a certain threshold during the previous quarter, while identifying the explanatory factors behind such a deterioration.

Furthermore, information available from the prudential and statistical reportings for each supervised entity is summarised in dashboards. Particular attention is paid to the new liquidity standards, the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). This reporting is mandatory for all credit institutions on an individual and consolidated basis. In accordance with the Delegated Act [52] laying down specifications for the LCR and the details of its phasing-in period, the LCR became a binding standard on 1 October 2015. The minimum requirement to cover liquidity needs was set at 60% from that date, at 70% on 1 January 2016, at

52 Commission Regulation (EU) 2015/61 of 10 October 2014 to supplement Regulation (EU) No 575/2013 of the European Parliament and the Council with regard to liquidity coverage requirement for Credit Institutions.

80% on 1 January 2017 and was increased to 100% on 1 January 2018. The BCL has implemented a model to conduct simulations of the NSFR. It is also important to note the interest shown in the quarterly prudential reporting tables on asset encumbrance[53] submitted since the beginning of 2015 by credit institutions and in the additional liquidity monitoring metrics[54] reported monthly since April 2016. The BCL performs checks on these reports submitted by significant and less significant banks.

Following the introduction of the prudential liquidity reportings mentioned above, a project to implement automated tools for processing and using this data was launched in 2016. Since the liquidity reportings are complex and heterogeneous by their nature and data sources, each analytical processing requires the development of tailor-made solutions. The objective of this project is to offer supervisors powerful and user-friendly analytical functionalities to facilitate an effective and efficient assessment of the liquidity situation of banks in the supervisory process. In particular, these tools enable supervisors to detect potential liquidity problems in an institution that may result from a negative trend in a particular reported item or from an identified absolute result.

Following the recommendations of the ESRB concerning foreign currency loans, the funding of credit institutions in US dollars and the funding of credit institutions, the BCL also performs a specific monitoring of these positions on a quarterly basis, both at an individual and aggregate level. Finally, a daily report with certain financial market indicators has also been developed. All these tools enable the necessary analyses to be carried out as part of the BCL's liquidity supervisory mission.

In terms of communication and information exchange within the SSM, an information management system, called "IMAS[55]", was put in place in 2014 enabling the exchange of information between the ECB and the national supervisory authorities. In a first phase, this tool was set up for the supervision of significant banks. Thus, IMAS provides a number of tools that replicate the methodology and common standards established by the SSM and help to organise and coordinate the supervision process of significant credit institutions. In addition, IMAS provides key information on these banks and is connected to a reporting and document management tool. As a participant in the JST, the BCL is connected to this tool. It was decided to also include the "less significant" credit institutions in IMAS in order to support the competent national authorities in their supervisory activities. This project was launched in 2016.

1.7.2.1.3 National and International Cooperation

The BCL continues its participation in the working groups dedicated to liquidity at the level of the Basel Committee and the European Banking Authority (EBA). The BCL also participates as a member of the EBA Board of Supervisors and other committees and sub-groups that are relevant to its supervisory mission. As a general rule, the involvement of the BCL in these committees and working groups is done jointly with the CSSF.

In addition, the Liquidity Supervision Division contributed to the internal preparation of the files in the context of the participation of the Director General of the BCL in his capacity as member of the Resolution Board[56], the Council for the Protection of Depositors and Investors[57], the Resolution Fund and the Luxembourg Deposit Guarantee Fund[58].

53 Commission Implementing Regulation (EU) 2015/79 of 18 December 2014 amending Implementing Regulation (EU) No 680/2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council as regards asset encumbrance, single data point model and validation rules.

54 Commission Implementing Regulation (EU) 2016/313 of 1 March 2016amending Implementing Regulation (EU) No 680/2014 with regard to additional monitoring metrics for liquidity reporting.

55 Information Management System (IMAS) for the Single Supervisory Mechanism.

56 The Resolution Board is the CSSF's internal executive body to exercise the resolution function of credit institutions.

57 The Council for the Protection of Depositors and Investors is the CSSF's internal executive body, which manages and administers the Luxembourg Deposit Guarantee Fund and the Luxembourg Investor Compensation System.

58 The Luxembourg Deposit Guarantee Fund (*FGDL* or *Fonds de Garantie des Dépôts Luxembourg*) is a public institution whose main purpose is to ensure the repayment of depositors in the event of unavailability of their deposits. The FGDL makes the necessary funds available for the repayment of deposits not available, in principle within 7 working days, and this up to 100,000 euros per person and per institution.

1.7.2.2 Oversight

The oversight of payment and securities settlement infrastructures is an important mission of the ESCB, given the essential role of these infrastructures in the implementation of monetary policy, the preservation of the stability of the financial sector and the maintenance of a smooth functioning of the economy in general.

The oversight activity of the BCL is based on European legislation, namely the TFEU and the ESCB and ECB Statutes, as well as on national legislation. In this respect, the provisions of the law of 23 December 1998 on the monetary status and the *Banque centrale du Luxembourg* entrust the BCL with the mission of ensuring the security and efficiency of payment and securities settlement systems and the security of payment instruments. BCL Regulation 2016/N°21[59] of 15 January 2016, abrogating BCL Regulation 2010/N°6 of 8 September 2010 as amended, sets out, inter alia, the oversight framework as well as the obligations of system operators, payment instrument issuers and governance authorities and specifies the procedures for carrying out the oversight activity. This regulation also stipulates that the BCL carries out its oversight activity on the basis of information and statistical data collected on a regular or ad hoc basis from the entities concerned. This information is supplemented by regular meetings and, if necessary, on-site visits. They concern in particular the development of the infrastructures' activities, their performance, their governance and their risk management.

In addition to the oversight activities of the systems and infrastructures operating in Luxembourg and of the payment instruments made available to the public in Luxembourg, the BCL also contributes to the oversight activities coordinated at the Eurosystem level. These include payment infrastructures and instruments with no clear domestic anchorage.

Payment systems

The BCL contributed to the oversight activities of the TARGET2 payment system operated by the Eurosystem as well as of the EURO1 and STEP2 systems operated by EBA Clearing. At the regulatory level, the BCL also monitored the evolution of the ECB Regulation No. 795/2014 of 12 August 2014 on systemically important payment systems oversight requirements. This regulation was amended in November 2017 to include, among others, liquidity risk mitigation, cyber resilience and additional powers for competent authorities.

In addition to its contribution to the coordinated oversight activities of the TARGET2 payment system, the BCL also monitors certain decentralised aspects of TARGET2-LU, such as the local technical components ensuring the connectivity of the BCL to the single platform. This oversight is carried out in accordance with the provisions of Annex 2 of the oversight guide for systemically important payment infrastructures, dated 29 August 2016.

Overall, the payment systems listed above operated in a stable and robust manner in 2017.

Finally, the BCL monitored the development of payment systems offering the possibility of making instant payments, notably through the launch of RT1[60] on 21 November 2017, as well as the launch of the TARGET Instant Payment Settlement (TIPS) scheduled for November 2018.

Securities settlement systems

With regard to securities settlement systems, the scope of oversight focused on the systems operated in Luxembourg by Clearstream Banking S.A. (CBL), LuxCSD S.A. (LuxCSD) and VP Lux S.à r.l. (VP LUX). In general, the functioning of these securities settlement systems proved stable and robust during 2017.

In this respect, the BCL monitored the day-to-day functioning of these infrastructures as well as the development of the activities and risks to which these systems are exposed, by analysing the information obtained monthly from the operators and by participating in meetings and thematic visits.

59 Regulation of the *Banque centrale du Luxembourg* 2016/ N° 21 of 15 January 2016 on the oversight of payment systems, securities settlement systems and payment instruments in Luxembourg.

60 RT1: The instant payment system operated by EBA Clearing.

Furthermore, the BCL, in cooperation with the CSSF, followed up on the recommendations issued in 2016 against CBL in the context of an assessment of the compliance of the securities settlement system with respect to the principles of the CPMI-IOSCO[61] committee applicable to market infrastructures. The BCL also followed up on the recommendations issued by the International Monetary Fund (IMF) after the CBL assessment under the Financial Sector Assessment Program (FSAP) in December 2016. Finally, the BCL continued the assessments of the securities settlement systems operated in Luxembourg by LuxCSD and VP LUX against the principles of the CPMI-IOSCO committee. The finalisation of these assessments has been postponed in order to reflect the amendments considered by these operators in 2017 with regard to their authorisation as central securities depositories in accordance with Regulation No 909/2014 on improving securities settlement in the European Union and on central securities depositories published on 23 July 2014.

Concerning the above-mentioned regulation and the related regulatory technical standards, the BCL participated, jointly with the CSSF, in the preliminary review of information provided by the operators of securities settlement systems in Luxembourg in view of their authorization, and in regular meetings with these operators. In this context, the BCL acts in two ways: firstly, as the representative of the Eurosystem in the capacity of central bank of issue for the euro and secondly, as the central bank in charge of the oversight of securities settlement systems in Luxembourg.

For the purpose of its oversight of securities settlement systems, the BCL also continued its cooperation with other central banks and supervisory authorities. In particular, the BCL cooperated closely with the National Bank of Belgium (NBB) and the CSSF on aspects of common interest relating to the interoperable link between the securities settlement systems operated by CBL and Euroclear Bank. The BCL has pursued the discussions concerning the adaptations envisaged by the above operators in order to ensure compliance of this link with international and European requirements. In this context, the BCL, the NBB and the CSSF also formalised the terms of their cooperation in a Memorandum of Understanding (MoU) in December 2017.

In parallel, the BCL formalised a cooperation agreement with the Hong Kong Monetary Authority (HKMA) and the CSSF relating to the link between the securities settlement system operated by CBL and the Central Moneymarkets Unit (CMU), a system for the clearing and settlement of HKD and foreign currency denominated bonds operated by the HKMA.

With regard to the "Target2-Securities" (T2S) settlement platform, the BCL monitored the various migration phases of the central securities depositories. This centralised technical platform aims at offering harmonised securities settlement services in central bank money, in euro and in other currencies. The LuxCSD system migrated successfully on 6 February 2017. The BCL also participated at the Eurosystem level in the definition of the T2S statistical framework that is necessary for the coordinated oversight of the platform.

Finally, during 2017, the BCL revoked the system operated by globeSettle S.A., which decided to cease its activities. This revocation was made in accordance with Articles 109 and 110 of the Law of 10 November 2009 on payment services, the activity of electronic money institutions and the finality of settlement in payment and securities settlement systems, and Article 10(3) of BCL Regulation 2016/N°21 of 15 January 2016.

Cyber resilience

In 2017, the BCL actively contributed to the implementation of the Eurosystem's cyber resilience strategy for market infrastructures. This strategy aims at strengthening the maturity of market infrastructures in the area of cyber security, in order to increase the cyber resilience of the financial sector as a whole. In this context, the BCL participated in the development of a survey designed to assess the level of maturity of the various market infrastructures, including domestic securities settlement systems, in terms of cyber resilience. The BCL also contributed to the definition of a European "Red Team"[62] intrusion test framework, which, once finalised, should enable the oversight or supervisory authorities to acquire an assurance on the level of resistance of market infrastructures to cyber-attacks.

61 Committee on Payments and Market Infrastructures – International Organization of Securities Commissions.

62 A Red Team intrusion test is an exercise simulating the techniques and methods of a real hacker in order to measure the efficiency of the security controls put in place as well as an organisation's resistance to cyber-attacks.

Payment instruments

The payment instruments include, inter alia, the credit transfers scheme, the direct debit scheme, the card payment schemes and the electronic money schemes used by the public in Luxembourg.

In 2017, the BCL monitored the evolution of issuers' activities as well as payment solutions in Luxembourg and focused on developments in this area, especially on security-related aspects. The BCL's oversight was based on the analysis of qualitative and quantitative information collected by the BCL after exchanges with certain entities. For the purpose of its oversight, the BCL has also introduced a specific framework for collecting information from certain actors.

Furthermore, the BCL actively contributed to the work of the European Forum for the Security of Retail Payments (SecuRe Pay), co-chaired by the ECB and the European Banking Authority (EBA). The purpose of this forum is to facilitate a common and consistent understanding between the central banks in charge of the oversight of payment instruments and the authorities responsible for the prudential supervision of payment service providers on topics related to the security of retail payments in the European Union. In 2017, this forum focused in particular on finalising the regulatory technical standards relating to strong authentication and secure communication in accordance with the mandate granted to the EBA in the Second Payment Services Directive (PSD2). These technical standards were transmitted by the EBA in early 2017 to the European Commission for adoption. The BCL also participated in the development of guidelines by the EBA on the collection of fraud statistics to be implemented under the PSD2. To this end, a public consultation was initiated in August 2017. The publication of the final EBA guidelines is foreseen for 2018.

Moreover, at the Eurosystem level, the BCL cooperated in the joint assessment exercise of an international card payment scheme against the oversight framework applicable to these schemes. Finally, the BCL also contributed to the joint assessment of the SEPA[63] direct debit and instant credit transfer schemes coordinated within the Eurosystem.

1.8 REGULATORY AND LEGISLATIVE DEVELOPMENTS

1.8.1 European legislation Législation européenne

The *Banque centrale du Luxembourg* (BCL) follows with particular interest the developments of the European and national legislation that are relevant for the Eurosystem as well as to the deepening of the Economic and Monetary Union (EMU), notably those concerning the Banking Union, the Capital Markets Union and economic governance.

In 2017, discussions continued on the deepening of EMU, as well as on the broader orientation of European integration.

1.8.1.1 Banking Union

The Banking Union is based on three pillars: the Single Supervisory Mechanism (SSM) since 4 November 2014, the Single Resolution Mechanism (SRM) since 1 January 2016, and the Deposit Guarantee Scheme (DGS), the latter having only been harmonised at this stage. The sections below describe the legislative developments of these three pillars in 2017.

1.8.1.1.1 Prudential supervision

SSM Scope

The geographical scope of the SSM consists of the Members States whose currency is the euro, as well as Member States of the European Union (EU) whose currency is not the euro that voluntarily decide to be subject to the banking supervision of the European Central Bank (ECB) under a regime of close cooperation.

63 *Single Euro Payments Area* (SEPA).

In 2017, no EU Member State joined the euro area and no EU Member State outside the euro area established a close cooperation as provided for in the SSM Regulation[64].

SSM supervised entities

At the euro area level, the number of institutions subject to the direct prudential supervision of the ECB decreased in 2017 by around ten to 119 significant institutions, as of 31 December 2017.

The number of significant institutions having their registered office in Luxembourg did not change in 2017. The four institutions are: Banque et Caisse d'Epargne de l'Etat, Luxembourg, Precision Capital S.A., RBC Investor Services Bank S.A. and J.P. Morgan Bank Luxembourg S.A.

SSM Governance

The Governing Council is the ultimate decision-making body of the ECB in the area of prudential supervision of credit institutions.

In addition, the SSM Regulation provides for the creation, within the ECB, of a Supervisory Board responsible for preparing draft decisions on banking supervisory matters. It is notably composed of one representative of each national competent authority and, if the national central bank (NCB) is not the national competent authority, by one representative of the NCB in addition to one from the supervisory authority. It is composed of 32 members, including one member from the BCL. This internal body of the ECB held 32 meetings during 2017, among which 22 took place in Frankfurt.

During 2017, the Governing Council adopted approximately 2 300 prudential decisions, mainly via written procedure, based on "complete draft decisions" that were proposed by the Supervisory Board, pursuant to a non-objection procedure. For banking supervision decisions in the field of macroprudential supervision, this non-objection procedure does not apply and the Governing Council may amend the draft decisions proposed by the Supervisory Board. Additionally, the non-objection procedure does not apply when it comes to determining the general framework governing practical arrangements for cooperation within the SSM, which falls within the remit of the decision-making bodies of the ECB, i.e. the Governing Council and the Executive Board.

At the end of 2016, the Governing Council adopted a general framework for the delegation of decision-making powers with regard to supervisory tasks, which was the subject of implementing measures published in 2017. This delegation applies to decisions concerning the significance of institutions subject to prudential supervision and to decisions on the good repute, knowledge, skills and experience of members of management bodies.

Joint Supervisory Teams

Joint Supervisory Teams (JSTs) are the main operational structure responsible for conducting the SSM supervision[65]. Pursuant to the SSM Framework Regulation, the BCL participates in the JSTs of significant institutions having their registered office in Luxembourg, as well as in some JSTs of significant banks established in other SSM Member States, which have subsidiaries in Luxembourg.

Harmonising national options and discretions

The exercise of a single supervision for the euro area by the ECB is considerably hampered by a lack of harmonisation of applicable national laws.

64 Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions.

65 Regulation (EU) No 468/2014 of the European Central Bank of 16 April 2014 establishing the framework for cooperation within the Single Supervisory Mechanism between the European Central Bank and national competent authorities and with national designated authorities ("SSM Framework Regulation") (ECB/2014/17).

In 2017, the ECB continued its efforts to harmonise the application of options and discretionary powers under EU law, which began in 2016, by identifying the options and discretions left to national competent authorities, which should be exercised in the same way in respect of less significant institutions pursuant to a guideline and recommendation dated 4 April 2017.

Indeed, the ECB underlined that an inconsistent application of options and discretions in the countries participating to the SSM could undermine the overall soundness of the supervisory framework and the comparability of prudential requirements between credit institutions. This would make it difficult for market participants and the general public to assess the robustness of credit institutions and their compliance with regulations. In addition, a high number of provisions accentuate regulatory complexity and increase compliance costs for banks, particularly those operating cross-border. Finally, this situation leaves scope for regulatory arbitrage.

Review of prudential requirements

On 23 November 2016, the European Commission presented a package of reforms of existing European banking rules. These reforms would further strengthen the resilience of EU credit institutions and reinforce financial stability.

The European Commission proposes to amend the following legislation:

- the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRD IV), which were adopted in 2013;
- the Bank Recovery and Resolution Directive (BRRD) and the Single Resolution Mechanism (SRM) Regulation, which were adopted in 2014.

In 2017, the ECB delivered three opinions on the proposed changes to the legislative framework[66] and contributed to the work of experts at EU Council level.

Review of the SSM Regulation

On 11 October 2017, the European Commission published its report on the SSM, addressed to the European Parliament and the Council.

The Commission underlines that the establishment of the SSM has been generally successful and that the work of the ECB, with the assistance of national authorities, has been remarkable, in particular taking into account the diversity of supervisory practices of banks in the 19 participating Member States.

The report concludes that there is no need to amend the SSM Regulation at this stage.

1.8.1.1.2 The resolution of banks

Regulation (EU) No. 806/2014 establishing the SRM[67] in the context of the Banking Union entered into force on 19 August 2014 (SRM Regulation).

The SRM is the second pillar of the Banking Union. It foresees a crisis management regime based on the harmonisation achieved by the Directive on bank recovery and resolution[68] (BRRD[69]). It provides for a centralised European institutional framework for the resolution of significant banks and cross-border groups in the Member States participating in the SSM.

66 Opinion CON/2017/6 of 8 March 2017, Opinion CON/2017/47 and CON/2017/46 of 8 November 2017.

67 Regulation (EU) No 806/2014 of the European Parliament and the Council of 16 April 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 Bank Resolution Fund and amending Regulation (EU) No 1093/2010.

68 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directives 77/91/EEC and 82/891/EC, Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC and 2011/35/EC and Regulation (EU) No 1093/2010 and (EU) No 648/2012.

69 In French: *directive sur le redressement et la résolution des banques* (BRRD).

The SRM area corresponds to the SSM area, i.e. the euro zone.

The SRM comprises a Single Resolution Board (SRB) and a Single Resolution Fund (SRF). As the European resolution authority for the Banking Union, the SRB is responsible for preparing and enforcing the resolution of banks that are failing or likely to fail[70], in cooperation with the national resolution authorities of participating Member States. The SRB is based in Brussels and is composed of six full-time members who have all been appointed in 2015.

In 2017, the SRB took for the first time resolution measures concerning a significant bank in the Banking Union, namely *Banco Popular Español S.A.* (Banco Popular). Due to the strained liquidity situation of the bank, the ECB decided on 6 June 2017 that Banco Popular was "failing or likely to fail" and informed the SRB. The SRB decided on 7 June 2017 that the resolution and sale of Banco Popular to another bank was in the public interest to protect its depositors and ensure financial stability. This resolution entered into force the same day, following approval by the European Commission[71].

Moreover, the SRB decided on 23 June 2017 with respect to two other significant banks, namely *Banca Popolare di Vicenza S.p.A.* and *Veneto Banca S.p.A.,* that their resolution was not in the public interest. As a result, these two banks were liquidated in accordance with the national insolvency procedure applicable in Italy[72].

As regards the SRF, it is established under the control of the SRB to guarantee the availability of funding, in the medium-term, in case of restructuring of a credit institution. This fund is set up through bank contributions, which initially take place at the national level. In 2017, the SRB indicated that the SRF held € 17,4 billion. The SRF should reach the target level of at least 1 % of the amount of covered deposits of all credit institutions authorised in all of the participating Member States, during a transitional period of eight years (2016-2023). The amount to be reached is approximately € 55 billion.

An intergovernmental agreement on the transfer and mutualisation of the contributions to the SRF, signed on 21 May 2014, provides for the progressive shift from the existing national resolution funds to the SRF, with relation to the banks covered by the SRM, during the above-mentioned transitional period. The contributions of banks will be allocated to different compartments corresponding to each participating Member State. According to the terms of the agreement, those compartments will be subject to a progressive mutualisation, so that they are merged at the end of the transitional period.

The cooperation of the ECB and the SRB is governed by an agreement signed in 2015. The SRM Regulation organises the allocation of responsibilities between European and national authorities. Accordingly, the SRB is directly entrusted with the drawing-up of resolution plans and the adoption of all resolution decisions, related in particular to the entities supervised by the ECB, as well as cross-border groups, while the national resolution authorities are in charge of the other credit institutions. The SRB and the national resolution authorities shall cooperate closely, in accordance with the SRM Regulation. The national authorities are also responsible for implementing the resolution decisions of the SRB at the national level.

1.8.1.1.3 Deposit Protection

The third pillar of the Banking Union, namely the creation of a European system of deposit protection, has not made progresses.

On 24 November 2015, the European Commission published a legislative proposal, in the form of a regulation, for the establishment, in three consecutive steps, of a European Deposit Insurance Scheme (EDIS), as proposed in the Five Presidents' Report[73], in view of reaching a fully-fledged European deposit guarantee scheme by 2024.

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70 In French: *défaillance avérée ou prévisible.*

71 For more information, please see the SRB's website (https://srb.europa.eu).

72 For more information, please see the SRB's website (https://srb.europa.eu).

73 See Chapter 1.8.1.3.

The EDIS would help increase depositors' confidence and ensure a level playing field for all banks in the Banking Union, hence contributing to greater financial stability in the euro area in general.

To encourage progress in the ongoing negotiations, at the European Parliament and Council level, the Commission, in its communication of 11 October 2017[74] on completing the Banking Union, suggested some possible steps with regard to the phases and timeline of EDIS. In particular, the communication suggests a more gradual introduction of EDIS compared with the original proposal of November 2015. There would be only two phases: a more limited reinsurance phase and, later, coinsurance. However, moving to this second phase would be conditional on achieving progress in reducing risks.

The proposal for the EDIS regulation is based on the framework currently applicable to national Deposit Guarantee Schemes (DGS), which is provided for by Directive (EU) N° 2014/49/EU on DGS (DGSD)[75], aiming at improving the protection of depositors beyond the requirements of Directive 94/19/EC[76], as amended by Directive 2009/14/EC[77]. The DGSD has improved the functioning of national DGS and offers a better protection to depositors, namely by ensuring a harmonised coverage up to € 100,000 in the whole EU and a reduction of the delays of reimbursement to seven working days.

EDIS aims at ensuring full harmonisation of Deposit protection by setting up a common fund to which all banks of the Banking Union would contribute in the context of a European system administered by a central authority, the Single Resolution Board. This would also allow to align the architecture of the three pillars of Banking Union (supervision, resolution and deposit guarantee).

The third pillar of the Banking Union is supported by the Eurosystem.

1.8.1.2 Capital Markets Union

The Capital Markets Union (CMU) constitutes a new aspect of the European single market and a priority for the European Commission.

The BCL, along with the whole Eurosystem, supports the CMU and, in particular, the measures relating to the revival of securitisation[78].

The draft regulation proposed by the European Commission setting out common rules in the field of securitisation, as well as a European framework for simple, transparent and standardised securitisation transactions (STS) was approved by the European Parliament on 26 October 2017 and by the European Council on 20 November 2017. The regulation on STS securitisation will apply starting from 1 January 2019.

1.8.1.3 Economic governance

Since the financial and economic crisis several measures have been taken between 2011 and 2013 to strengthen the EU legal framework on economic governance, mainly the Stability and Growth Pact. In particular, amendments were adopted in 2011 through the economic governance package (Six-pack), in 2012 through the Treaty on Stability, Coordination and Governance (TSCG) and in 2013 through the budgetary surveillance package (Two-pack). In this context, the new procedure concerning macroeconomic imbalances has been put in place.

In the budgetary policy area, the reform aimed to strengthen and deepen budgetary surveillance and to introduce additional surveillance for euro area Member States to ensure the correction of excessive

74 Communication to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions of 11 October 2017 on completing the Banking Union (COM(2017) 592 final).

75 Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes (recast).

76 Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on deposit-guarantee schemes.

77 Directive 2009/14/EC of the European Parliament and of the Council of 11 March 2009 amending Directive 94/19/EC on deposit-guarantee schemes as regards the coverage level and the payout delay.

78 In French: *titrisation.*

deficits and the integration of European economic and budgetary policy recommendations into national budgetary procedures.

In parallel, in order to ensure the stability of the euro area as a whole, stabilisation mechanisms have been put in place. In 2010, a temporary mechanism consisting of the European Financial Stability Fund (EFSF)[79] and the European Financial Stabilisation Mechanism (EFSM)[80] was set up.

Since 1 July 2013, following the revision of Article 136 TFEU[81] by a European Council decision[82], the latter have been replaced by a permanent mechanism, the European Stability Mechanism (ESM)[83].

The ESM is an international financial institution based in Luxembourg.

Strengthening economic governance and completing the Banking Union remain major challenges for the consolidation of the Economic and Monetary Union (EMU). Within the current regulatory framework, the Eurosystem regularly emphasises the need for consistent application over time and by all Member States of the provisions of the Stability and Growth Pact and the Macroeconomic Imbalance Procedure.

In 2017, discussions on deepening EMU continued.

On 1 March 2017, with the presentation of the White Paper on the future of Europe, the European Commission launched a wider political debate on European integration. This White Paper, followed by other thematic reflection papers, describes five possible policy scenarios.

On 31 May 2017, the European Commission presented a reflection paper on the deepening of the EMU, based on the report of the five Presidents of 22 June 2015[84] while developing proposals.

On 6 December 2017, the European Commission presented more specific proposals with a roadmap on the completion of the EMU[85]. These include the proposal to establish a European Monetary Fund, to incorporate the TSCG into the Union's regulatory framework and to introduce new budgetary instruments and a European Minister for Finance and Economy.

The debate is still ongoing.

The Eurosystem supports the deepening of EMU.

1.8.1.4 ECB Legal Acts

Payment systems and market infrastructures

The ECB adopted the Guideline (EU) 2017/2082 of 22 September 2017 amending Guideline ECB/2012/27 on a Trans-European Automated Real-time Gross settlement Express Transfer system (TARGET2) (ECB/2017/28).

This Guideline has amended the TARGET2 Guideline and has been implemented in the BCL Terms and Conditions for Participation in TARGET2-LU[86].

79 In French: *Fonds européen de stabilité financière* (FESF).

80 Council Regulation (EU) No 407/2010 of 11 May 2010 establishing a European financial stabilisation mechanism, as amended by Council Regulation (EU) 2015/1360 of 4 August 2015. In French: *Mécanisme européen de stabilisation financière* (MESF)

81 Article 48(6) TEU.

82 European Council Decision of 25 March 2011 (2011/199/EU).

83 In French: *Mécanisme européen de stabilité* (MES).

84 Rapport of the President of the Commission, in close cooperation with the Presidents of the European Council, the Eurogroup, the European Central Bank and the European Parliament "Completing Europe's Economic and Monetary Union" of 22 June 2015.

85 Communication from the Commission to the European Parliament, the European Council, the Council and the European Central Bank. Further steps towards completing Europe's Economic and Monetary Union: a roadmap, 6 December 2017 (COM(2017)821 final).

86 The BCL Terms and Conditions for Participation in TARGET2-LU L may be consulted on the BCL's website (www.bcl.lu).

Central counterparties (CCPs)[87]

On 22 June 2017, the ECB Governing Council adopted a recommendation to amend Article 22 of the Statute of the European System of Central Banks and of the ECB in order to grant the ECB a clear legal competence with regard to clearing systems for financial instruments. The recommendation has been sent to the European Parliament and to the Council for adoption of a decision amending Article 22.

This recommendation follows the logic of the draft regulation of the European Commission amending the *European Market Infrastructure Regulation* (EMIR)[88], which provides for an enhanced role of central banks of issue. The draft regulation aims to provide the ECB with powers in the area of supervision of central counterparties (CCPs), in particular with regard to the recognition and supervision of systemically important third-country CCPs clearing significant amounts of euro-denominated transactions.

Banking supervision

In 2017, the Governing Council adopted two new regulations on the reporting of supervisory financial information[89] and the date of application of reporting obligations for less significant institutions[90].

In order to define the general framework for the delegation of certain decisions, the Governing Council adopted numerous decisions, recommendations and guidelines, all published in the Official Journal of the European Union.

1.8.1.5 Litigation relating to ECB legal acts

Monetary policy

By decision of 18 July 2017, the German Federal Constitutional Court suspended a national procedure initiated by the parties Heinrich Weiss and others, Bernd Lucke and others, Peter Gauweiler, Johann Heinrich von Steine and others, with regard to various German public acts and to ECB legal acts concerning the Public Sector Purchase Programme (PSPP). The latter filed a reference for a preliminary ruling under Article 267 TFEU with the Court of Justice of the European Union (C-493/17).

On 18 October 2017, the President of the Court of Justice of the European Union rejected the application of the German Federal Constitutional Court for the case to be submitted to the accelerated procedure. It was decided to try to consider the case as a matter of priority. The proceeding was ongoing as of 31 December 2017.

Banking supervision

On 16 May 2017, the General Court ruled for the first time on the application of the SSM Regulation and dismissed *Landeskreditbank Baden-Württemberg*'s appeal against the direct supervision by the ECB. In its judgment[91], the Court stressed the exclusive nature of the ECB's prudential supervision and the importance of the role played by the Administrative Board of Review (ABoR). An appeal against this decision was lodged by the German bank.

As of 31 December 2017, almost 20 appeals had been brought before the European Court of Justice against decisions taken in the field of prudential supervision.

87 In French: *contreparties centrales*.

88 European Market Infrastructure Regulation (EMIR); COM (2017) 331 final.

89 Regulation (EU) 2017/1538 of the European Central Bank of 25 August 2017 (ECB/2017/25).

90 Regulation (EU) 2017/1539 of the European Central Bank of 25 August 2017 (ECB/2017/26).

91 Judgment of the General Court of 16 May 2017, *Landeskreditbank Baden-Württemberg* – Förderbank / ECB (Case T-122/15).

1.8.2 National legislation

1.8.2.1 Enacted Law

Protection of the single currency (euro)

The Law of 28 July 2017[92] amending the Penal Code and the Code of Penal Procedure (formerly the Code of Criminal Instruction) seeks to implement into Luxembourg law Directive 2014/62/EU of the European Parliament and of the Council of 15 May 2014 on the protection of the euro and other currencies against counterfeiting by criminal law and replacing Council Framework Decision 2000/383/JHA of 29 May 2000.

The Law consists of two Articles.

Article 1 of the Law of 28 July 2017 provides, on the one hand, for the provisions amending the Penal Code imposed by Directive 2014/62/EU and, on the other hand, for a restructuring and reorganisation of the articles. The law introduces a definition of "currency" (i.e. notes and coins which are legal tender in the Grand Duchy of Luxembourg or abroad or the issue of which is authorised by the law of a foreign State or by virtue of a provision having the force of law) and no longer distinguishes between coins on the one hand and notes, securities and other payment instruments on the other hand. The sanctions for offences are, as a whole, higher than those provided for until now. The offences concern counterfeiting, alteration, falsification of currency, physical payment instruments protected against imitation or fraudulent use, and titles representing property rights, claims or securities as well as counterfeiting, alteration and falsification of seals, stamps, hallmarks and marks. With regard to compliance with the requirements of the Directive on the liability of legal persons and the sanctions applicable to legal persons, reference is made to the general system of penal liability of legal persons, which was introduced in Articles 34 to 40 of the Penal Code by the Law of 3 March 2010[93].

Article 2 of the Law of 28 July 2017 also includes provisions amending the Code of Penal Procedure (formerly the Code of Criminal Instruction) following the reorganisation of Chapters I to III of Title III of Book II of the Penal Code and the renumbering of the articles referred to therein. These are only specific technical adaptations, which do not call for comments.

1.8.2.2 BCL Regulation

In 2017, the BCL did not issue any new regulation. The list of BCL regulations is available on its website.

1.8.2.3 Interest rates

The legal interest rate for the year 2017 was set at 2.25%[94].

It should be noted that this rate does not correspond to a particular money market reference rate.

Late payment interest rates on overdue claims in commercial transactions are calculated, unless otherwise provided for by contract, on the basis of the ECB's reference rate plus a margin. The late payment interest rate is published every six months in the Memorial B (Official Gazette). For 2017, the late payment interest rate was set at 8%[95] for the first and second semester.

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92 Law of 28 July 2017 amending the Penal Code and the Code of Penal Procedure in view of implementing Directive 2014/62/UE of the European Parliament and of the Council of 15 May 2014 on the protection of the euro and other currencies against counterfeiting by criminal law and replacing Council Framework Decision 2000/383/JHA.

93 Law of 3 March 2010 1. Introducing the penal liability of the legal persons in the Penal Code and in the Code of Criminal Instruction 2. Amending the Penal Code, the Code of Criminal Instruction and other legal provisions.

94 Grand-ducal Regulation of 23 December 2016 on the determination of the legal interest rate for the year 2017 (Memorial A – N° 296 of 27 December 2016, p. 6185); Grand-Ducal Regulation of 12 December 2017 on the determination of the legal interest rate for the year 2018 (Memorial A – N° 1043 of 13 December 2017, http://legilux.public.lu/eli/etat/leg/rgd/2017/12/12/a1043/jo).

95 Memorial B – N°208 of 31 January 2017 (http://legilux.public.lu/eli/etat/adm/pa/2017/01/24/b208/jo); Memorial B – N°2728 of 13 September 2017 (http://legilux.public.lu/eli/etat/adm/pa/2017/09/11/b2728/jo).

The above-mentioned rates include the margin provided for by the amended law of 18 April 2004 on payment deadlines and late payment interests. This margin increased from 7% to 8% starting from 15 April 2013 following the entry into force of the law of 29 March 2013 on combating late payment in commercial transactions[96].

1.8.2.4 Bills

Macroprudential measures

Bill n°7218[97]

The purpose of this bill is to supplement the legislative framework regarding macroprudential tools in the event of a threat to the financial stability or the financial system in Luxembourg arising from developments in the residential property sector.

To this end, the bill gives the *Commission de surveillance du secteur financier* (CSSF) the power to adopt new macroprudential tools to set the conditions for granting loans relating to residential property located in Luxembourg. This includes credit institutions, insurance companies and professionals involved in lending operations.

Furthermore, the bill mentions that the BCL, within the framework of the Systemic Risk Committee, carries out analyses and studies in order to identify as soon as possible the systemic risks that may appear in the financial system. A sound analytical framework is central to efficient and credible macroprudential supervision. The establishment of such a framework requires access to a range of data. The bill also provides for an amendment to the Act of 1 April 2015 creating a Systemic Risk Committee to facilitate access by the BCL to data available from State administrations and public institutions.

In its opinion of 19 February 2018, the ECB stresses in particular that:

"The ECB issued an opinion on the draft law establishing the Systemic Risk Committee in 2014[98]*. The following observations are without prejudice to the recommendations made in that opinion, which are reiterated in this opinion, notably the principle that the ECB and the national central banks (NCBs) should play a leading role in macro-prudential oversight, given their expertise and existing responsibilities in the area of financial stability (point 5.2) and that any additional task that may be entrusted to the BCL with regard to macro-prudential policy must not affect the BCL's institutional, functional and financial independence, or that of its Governor.[...]*

From a statistical perspective, the ECB notes the extended right of the BCL to access information available from state departments and public institutions. This is basically in line with Article 32 of the BCL Organic Law, which provides that, in order to undertake its tasks, the BCL shall be empowered to collect the necessary statistical information, either from the competent national authorities or directly from economic agents. The BCL may likewise perform spot checks of the information from these authorities and economic agents, in accordance with relevant Community law provisions and within the competences of the ESCB and the ECB. However, the draft law, which concerns the research and analysis work of the Systemic Risk Committee, should also provide for access to more granular information, to the extent and at the level of detail necessary for the performance of tasks of the ESCB. This would be a necessary condition to the exercise of the analytical capabilities of the BCL, also with regard to its role in the Systemic Risk Committee[99]*".*

96 Law of 29 March 2013 on combating late payment in commercial transactions – implementing Directive 2011/7/EU of the European Parliament and Council of 16 February 2011 on combating late payment in commercial transaction, and - amending the law of 18 April 2004 on payment deadlines and late payment interests.

97 Bill on macro-prudential measures on residential mortgage loans in Luxembourg and amending: - the amended law of 5 April 1993 on the financial sector; the law of 1st April 2015 establishing a Luxembourg Systemic Risk Committee and amending the amended law of 23 December 1993 concerning the monetary status of the Central Bank of Luxembourg.

98 See Opinion CON/2014/46. All ECB opinions are published on the ECB's website at www.ecb.europa.eu.

99 Paragraphs 2 and 3.3. of the ECB Opinion of 19 February 2018 (CON/218/9).

Central Securities Depositories

Bill n°7165[100]

The bill designates the CSSF as the competent national authority for the authorisation and supervision of central securities depositories (CSDs). It gives the CSSF the powers necessary for the exercise of these tasks and establishes a system of sanctions applicable in the event of breach of Regulation (EU) No 909/2014[101].

Some CSDs are active at international level and are already subject to supervision by the CSSF as a bank or Professionals of the financial sector (PFS). The regulation is adapted to the specificities of CSDs and therefore takes into account their risk profile: CSDs are essentially exposed to operational risk.

Fight against money laundering and terrorist financing

Bill n°7128[102]

This bill amends a certain number of laws and in particular, the law of 12 November 2004 on the fight against money laundering and terrorist financing, governing this matter in Luxembourg. Particular emphasis is placed on the professionals' duty to conduct an in-depth analysis of the money laundering or terrorist financing risks while identifying situations in which reinforced monitoring is requested.

It further imposes the collection of certain data related to the originators and the beneficiaries when transferring funds.

This bill also provides a detailed mechanism of supervision and sanctions depending on the professionals concerned in case of breach of their duties as regards anti-money laundering and fight against terrorist financing, but also when transferring funds. It includes provisions concerning the members of the boards of central banks as politically exposed persons.[103]

Payment services

Bill n°7195

This bill aims at transposing the second Directive on payment services (PSD2)[104] whose primary objective is to adapt the text of the existing framework to the new account information services and payment initiation services to better protect the users.

100 Draft law on Central Securities Depositaries and implementing Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012.

101 Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012.

102 Bill on 1. The implementation of the provisions on the professional obligations and the powers of the supervisory authorities in the field of combatting money laundering or terrorist financing under Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC; 2. The implementation of Regulation (EU) 2015/847 of the European Parliament and of the Council of 20 May 2015 on information accompanying transfers of funds and repealing Regulation (EC) No 1781/2006; 3. The modification of: a) the amended law of 12 November 2004 relating to the fight against money laundering and against the financing of terrorism; b) the amended law of 10 November 2009 relating to payment services; c) the amended law of 9 December 1976 relating to the organisation of the notaries; d) the amended law of 4 December 1990 relating to the organisation of the service of judicial officers; e) the amended law of 10 August 1991 on the profession of lawyer; f) the amended law of 5 April 1993 on the financial sector; g) the amended law of 10 June 1999 on the organisation of the profession of accountant; h) the law of 21 December 2012 on the activity of the Family Office; i) the amended law of 7 December 2015 on the insurance sector; j) the law of 23 July 2016 on the audit profession.

103 This bill was adopted in public session on 6 February 2018. Further to an exemption of second vote on 12 February 2018, the law was adopted on 13 February 2018 and published to the Official Gazette of the Grand-Duchy of Luxembourg, Memorial A – N°131 (http://legilux.public.lu/eli/etat/leg/memorial/2018/a131).

104 Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and the regulation (EU) n°1093/2010 and repealing Directive 2007/64/EC.

It further details the European passport regime and the procedure concerning the payment service providers and the electronic money institutions and enhances the cooperation procedure between authorities supervising the cross-border activities of the authorised entities.

The bill introduces provisions aiming at enhancing the rights of the payment service users. In the same vein, it provides that the payment service providers are, in principle, obliged to apply a strong customer authentication when the client accesses his online account, initiates an electronic operation or performs an action by using a means of distance communications with a risk of fraud. The bill also requires appropriate management procedure and reporting of the operational or important security incidents as well as a secure communication between the account managers and third-party providers.

Markets in financial instruments

Bill n° 7157[105]

In the area of markets in financial instruments, the bill n° 7157[106] aims to implement in Luxembourg the Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments (MiFID II Directive[107]) and certain provisions of the Regulation (EU) No 600/2014 (MiFIR[108]). These two European legal acts have been applicable since 3 January 2018. The MiFID II Directive and the MiFIR Regulation aim to fill the regulatory gaps in the field of financial markets, which have been revealed by the 2008 financial crisis. More concretely, they aim to adapt the legislation to the transformations, which have occurred in the financial markets since the entry into force of the Directive 2004/39/EC, known as MiFID, concerning financial instruments, in the area of financial products, but also in the area of technology, and to make financial markets more resilient and transparent, while enhancing investor protection and granting more efficient powers to supervisory authorities.

Data Protection

Bill n° 7184[109]

This bill, tabled on 12 September 2017, should be read in conjunction with Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data. The entry into force of the Regulation in all EU Member States is foreseen for 25 May 2018.

The BCL has put in place arrangements to ensure compliance with the provisions in the relevant areas.

105 Bill on markets in financial instruments: 1. transposing Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92 / EC and Directive 2011/61/EU; 2. transposing Article 6 of Commission Delegated Directive (EU) 2017/593 of 7 April 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council as regards the safeguarding of financial instruments and client funds, applicable product governance requirements and rules governing the granting or collection of fees, commissions or other monetary or non-monetary benefits; 3. implementing Regulation (EU) No 600/14 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012; 4. modifying: a. the amended law of 5 April 1993 on the financial sector; b. the amended law of 23 December 1998 establishing a Financial Sector Supervisory Commission; c. the amended law of 5 August 2005 on financial guarantee contracts; d. the amended law of 7 December 2015 on the insurance sector; and e. the amended law of 15 March 2016 on over-the-counter derivatives, central counterparties and trade repositories and amending various laws on financial services; and 5. repealing the amended law of 13 July 2007 on markets in financial instruments.

106 This bill was adopted in public session on 15 May 2018.

107 Directive on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU.

108 Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) n° 648/2012.

109 Bill establishing the National Commission for Data Protection and implementing Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, amending the Labour Code and the amended law of 25 March 2015 laying down the system of salaries and the conditions and procedures for advancement of State officials and repealing the law of 2 August 2002 on the protection of natural persons with regard to the processing of personal data.

1.9 COMMUNICATION

1.9.1 Publications

In accordance with its Organic Law, the *Banque centrale du Luxembourg* (BCL) publishes an annual report on its activities. It is available in French and English.

In 2017, the BCL published three Bulletins and the Financial Stability Review.

The BCL working papers, available on the BCL's website, present the results of research conducted by BCL staff and include non-technical summaries. In 2017, the BCL published ten working papers.

1.9.2 External BCL training activities

1.9.2.1 Cooperation with high schools

The BCL organises presentations for students in their last two years of high school and whose curriculum includes economics courses. Classes are welcomed with their teacher in the auditorium of the Monterey building for an educational and interactive presentation about the organisation and missions of the BCL and the Eurosystem. Other topics can also be addressed depending on teachers' requests and students' questions.

In 2016-2017, the BCL organised the fourth Eurosystem Generation €uro Students' Award school competition in Luxembourg. The competition, which has been held in around ten euro area countries since 2011, is aimed at secondary school pupils aged 16 to 19, particularly those studying economics. It aims at a better understanding of the role and functioning of the Eurosystem. In Luxembourg, the 2016-2017 edition of the competition, won by the "Wolfie" team of the Athénée de Luxembourg, ended with the national awards ceremony, organised at the BCL on 28 February 2017. The European awards ceremony, bringing together the top teams in each participating country, took place in Frankfurt on 4 and 5 April 2017.

The fifth Luxembourg edition of the competition was launched on 10 October 2017, with an information session for teachers and students organised at the Athénée de Luxembourg. Presentations were given to the participating students and teachers to prepare them for the various tests of the competition. This fifth edition ended on 27 February 2018.

The winning Luxembourg team of the Generation €uro Students' Award school competition (two members are not on the photo), accompanied by its teacher, was welcomed at the ECB on 4-5 April 2017 for the European award ceremony alongside the winning teams from the other participating countries in the presence of Mr Gaston Reinesch, President of the BCL, and Mr Mario Draghi, President of the ECB.

The Luxembourg team winner of the Generation €uro Students' Award school competition (two members are absent in the photo), accompanied by its teacher, was welcomed at the ECB on 4-5 April 2017 for the European award ceremony alongside the winning teams from the other participating countries. In the presence of Mr Gaston Reinesch, President of the BCL, and Mr Mario Draghi, President of the ECB.

1.9.2.2 Cooperation with schools

For the third time, the BCL participated independently in the European Money Week (Woch vun de Suen). From 27 to 31 March 2017, the BCL offered a programme enabling groups of pupils in cycle 4.1 (primary education) to familiarise themselves with money in general and the security features of euro banknotes and coins in particular. During the 2.5-hour educational sessions organised throughout the week, students benefited from fun and interactive presentations including films and games. After the theory came a practical workshop allowing them to test their knowledge about the security features of euro banknotes. The programme offered by the BCL was a great success, with nearly 300 students from 11 different schools attending.

Within the framework of the Woch vun de Suen, Mr Gaston Reinesch, Governor of the BCL, had the honour to welcome Her Royal Highness the Grand Duchess on 29 March 2017. Financial and social education being of great importance to the Grand Duchess, this initiative is taking place in Luxembourg under her High Patronage.

Her Royal Highness the Grand Duchess and Mr Gaston Reinesch, Governor of the BCL.

In his welcoming address, Mr Reinesch said that Her Royal Highness the Grand Duchess' visit demonstrated her "commitment to the youngest, to the youth who represent the future of our country and who will one day shape our society."

During her visit, the Grand Duchess attended a workshop during which students from Lycée Vauban, visiting the BCL that day, were able to test their knowledge about the security features of euro banknotes. The students also learned how to manage a budget responsibly thanks to a game specially developed by the BCL for this occasion. Her Royal Highness the Grand Duchess asked students about their impressions of the game before discussing issues related to responsible budget management.

Her Royal Highness the Grand Duchess in discussion with children participating in a game about responsible budget management.

Her Royal Highness the Grand Duchess honoured the award ceremony by personally presenting the gifts to the winners of the game.

Group photo of all participants

1.9.2.3 Group Visitor Presentations

In 2017, the BCL continued to welcome visitors for presentations organised within the framework of a programme that was launched in January 2015, enabling groups of 15 to 25 people to register for a presentation about the history of the BCL, Luxembourg money, and the Bank's missions. This initiative corresponds to the BCL's desire to make its European and national missions better known to the general public. The BCL can welcome one group of visitors per month, either on Thursday evening (18:00 - 19:30) or on Friday afternoon (14:30 - 16:00), for a presentation in French, Luxembourgish or English, depending on the visitors' preference. Visits can be booked on request by e-mail (info@bcl.lu).

Group photo of visitors from Luxembourg Accueil.

1.9.3 BCL website

During 2017, the BCL continued to modernise and improve its new website, which went online at the end of 2015.

In total, more than 262,000 users (+79%) visited the BCL's website in 2017 (more than 24.3 million clicks for more than 6.4 million page views).

In 2017, the most consulted document was the numismatic programme, which was downloaded nearly 7,770 times, followed by Mr Gaston Reinesch's "Essai d'Economie Politique", published in the summer of 2017 (4,100 downloads).

1.9.4 Video Communication

Film about the BCL's missions and activities

In order to better present its missions and activities, the BCL released a short explanatory film in January 2017 on its website (www.bcl.lu) and YouTube channel.

The aim of the film is to provide clear and accessible information about the main tasks of the BCL, its involvement in the Eurosystem and the key role played by the institution in the Luxembourg economy.

Film about cash management at the BCL

In the same spirit, the BCL made a short explanatory film about the handling of euro banknotes, available to the public on its website (www.bcl.lu).

Through the circulation and processing of banknotes and coins, the BCL ensures the proper functioning of banknote circulation and guarantees the provision of the requested denominations of banknotes and coins in sufficient quantity and of adequate quality, via commercial banks, to the public at all times.

The objective of the film is to present in more detail a mission of the BCL that is largely ignored by the general public. The different stages of the banknote processing cycle are explained: payment by commercial banks, authenticity control, counting, sorting and destruction of banknotes thanks to a machine dedicated to these tasks. The film also shows the packaging of the banknotes and coins as well as the resulting storage and handling.

Both films, available in 4 languages (Luxembourgish, German, French and English), also serve as teaching tools for presentations given to external groups or to the many students visiting the Bank.

1.9.5 BCL Library

The BCL library, inaugurated in 2005, is part of the national network of Luxembourg libraries.

The publications available at the library deal mainly with economics and law. The collection includes publications from international organisations, but also from national central banks.

The library is accessible to the public by prior appointment by telephone (+352 4774 4275) or by e-mail (bibliotheque@bcl.lu).

1.9.6 Press Relations

Throughout 2017, the BCL had regular contacts with the national and international press.

A total of 94 press releases were issued in 2017.

1.9.7 Information campaign about the new "Europe" series € 50 euro banknote

Throughout the first half of 2017, the BCL continued to raise public awareness about the introduction of the new € 50 banknote on 4 April 2017. As early as September 2016, the Bank installed banners of nearly 150 m2 on the facades of the "Pierre Werner" building on Boulevard Royal and of the building on Avenue Monterey.

Information material about the new € 50 banknote and its security features can be consulted on the following dedicated website: www.new-euro-banknotes.eu or on the BCL website: www.bcl.lu.

From the end of March, brochures about the new € 50 banknote were made available to the public at bank counters and at POST Luxembourg counters.

Banner on the "Monterey" building.
Photo: BCL

Banner on the "Pierre Werner" building on Boulevard Royal.
Photo: BCL

1.9.8 Conferences and Events

The BCL has been involved in organising the following conferences and events:

BCL's participation in Orange Week

The BCL participated in "Orange Week", a campaign launched by the UN Secretary General to raise awareness about violence against women and girls and end sexual violence.

Thus, the BCL headquarters were illuminated in orange from 19 to 25 November 2017, as were other public buildings, monuments and tourist sites in the Grand Duchy of Luxembourg.

Illumination of the façade of the historic building in orange.
Photo: BCL

Bridge Forum Dialogue Conferences

On 30 November 2017, a conference about "The ESM after 5 years: Successes, challenges and perspectives" was organised under the chairmanship of Mr Gaston Reinesch, Governor of the BCL and Chairman of the Bridge Forum Dialogue.

The speakers were Mr Jeroen Dijsselbloem, then Chairman of the Board of Governors of the European Stability Mechanism (ESM) and President of the Eurogroup and Minister of Finance of the Netherlands, and Mr Klaus Regling, Director General of the ESM and Vice-President of the Bridge Forum Dialogue.

From left to right: Mr Jeroen Dijsselbloem, Mr Gaston Reinesch and Mr Klaus Regling.

On 21 September 2017, a conference about "EMU architecture and the future of risk sharing in Europe" was organised under the chairmanship of Mr Gaston Reinesch. The speaker was Professor Jean Tirole, President of the Toulouse School of Economics and Nobel Prize laureate in Economics in 2014.

Mr Gaston Reinesch and Professor Jean Tirole.

On 28 February 2017, a conference about "Future financing of the EU: time for change" was organised under the chairmanship of Mr Werner Hoyer, President of the EIB and Vice-President of the Bridge Forum Dialogue.

The speaker was Mr Mario Monti, former Prime Minister of Italy and former European Commissioner.

Mr Mario Monti and Mr Werner Hoyer.

1.9.9 Research Activities and University Cooperation

The Governor of the BCL, Mr Gaston Reinesch, met with Mr John B. Taylor, Professor of Economics at Stanford University, for a working visit at the BCL on 3 April 2017.

Professor John B. Taylor and Mr Gaston Reinesch.

BCL research output is disseminated through its working paper series as well as the BCL Bulletin and Financial Stability Review. Several studies were published in peer-reviewed scientific journals (*Journal of Pension Economics and Finance, Journal of Money, Credit and Banking, Journal of Risk and Financial Management, Economic modelling, Journal of Demographic Economics, Applied Economics, Journal of Housing Economics, Review of Economic Dynamics*).

BCL researchers also presented their results in seminars and workshops organised by several institutions, including the *Banque de France, Banque Nationale de Belgique, Oesterreichische Nationalbank, European Association of Labour Economists, Royal Economic Society, University of Ghent, Goethe Universität Frankfurt* and the *Université de la Grande Région*.

Since December 2006, the BCL has been a member of the Eurosystem "Household Finance and Consumption Network". This research network designed and conducted a harmonised survey of the consumption and financial behaviour of households in the euro area. In Luxembourg, this survey was carried out by the BCL in collaboration with the *Luxembourg Institute of Socio-Economic Research* (LISER, previously CEPS/Instead). Results of the first two survey waves were published as working papers or text boxes in the BCL Bulletin.

In June 2017, the BCL organised a workshop on the subject "Household Finance and Consumption" with researchers in this domain that are active in Luxembourg and in the neighbouring regions.

As indicated above, BCL researchers prepared several studies intended to contribute to the discussion within the *Comité du risque systémique* (see 1.7.1.3). Finally, BCL researchers have continued developing projects in partnership with the Toulouse School of Economics (TSE). This partnership takes the form of joint publications, tutoring, training, conferences and workshops as well as exchanges between BCL and TSE researchers.

<u>University cooperation</u>

The BCL continued its cooperation with the University of Luxembourg, through which several staff members lectured at the Faculty of Law, Economics and Finance, as well as at the Luxembourg School of Finance. A BCL staff member also lectured in econometrics at the Université de Lorraine.

The BCL also organised occasional presentations for university students.

<u>Technical assistance</u>

In the context of a multi-year LuxDev project to improve capacity in the Vietnamese financial sector, in cooperation with the *Luxembourg House of Training*, a BCL expert provided a course on financial stability at the Vietnamese National Financial Supervisory Commission in December 2017..

1.10 EUROPEAN ACTIVITIES

1.10.1 Official visit at the European Central Bank

Mr Mario Draghi, President of the ECB, Mr Yves Mersch, member of the Executive Board of the ECB, and Mr Gaston Reinesch, Governor of the BCL and Member of the Governing Council of the ECB, welcomed His Royal Highness the Grand Duke of Luxembourg on 19 September 2017 for an official visit at the ECB's headquarters in Frankfurt.

Discussions focused in particular on projects to relaunch European integration, the functioning and tasks of the ECB and the design of euro banknotes.

From left to right: Mr Yves Mersch, H.R.H the Grand-Duke, Mr Mario Draghi and Mr Gaston Reinesch.
Photo: ECB

1.10.2 Activities at the level of the European Central Bank

The Governor of the *Banque centrale du Luxembourg* (BCL) participates in the meetings of the Governing Council and the General Council. The members of the Governing Council act in their personal capacity and not as national representatives.

Meetings of the Governing Council are normally held twice a month in Frankfurt at the headquarters of the European Central Bank (ECB). Since early 2015, the Governing Council in principle takes monetary policy decisions every six weeks instead of once a month, while maintaining the basic rule of two meetings per month. In 2017, some 1,500 decisions were adopted by the Governing Council by written procedure. The majority of these written procedures fall exclusively or partially within the scope of the Single Supervisory Mechanism (SSM). Written procedures are in fact the Governing Council's most widely used decision-making tool in this area. In areas related to central banking functions, the share of decisions taken during Governing Council meetings is higher.

The General Council, composed of the President and Vice-President of the ECB and the Governors of the European System of Central Banks (ESCB), normally meets quarterly in Frankfurt. The other members of the ECB's Executive Board participate in the meetings of the General Council, although they do not have the status of "members".

Committees with clearly defined mandates and areas of competence assist the ECB's decision-making bodies in the fulfilment of their tasks. The Governing Council or the Executive Board of the ECB may request them to carry out studies on specific subjects.

The committees report to the Governing Council via the Executive Board of the ECB.

In 2017, 16 Eurosystem/ESCB committees and the Market Infrastructure Board (MIB) were active to provide expertise in their respective areas of competence and to facilitate the decision-making process in the Governing Council.

Committees are generally composed of members of the staff of the Eurosystem central banks. However, the national central banks (NCBs) of the Member States which have not yet adopted the euro shall participate in the meetings of the committees whenever they deal with matters falling within the field of competence of the General Council. Representatives of other relevant institutions and bodies may also be invited.

To support the work related to the SSM, some of these committees meet when necessary in a composition corresponding to the SSM, i.e. including representatives of national competent authorities that are not NCBs.

Under the aegis of the committees, working groups and task forces with specific objectives meet in accordance with the committees' respective mandates. The Governing Council may also set up High Level Groups or Task Forces to study specific issues.

1.10.3 The Economic and Financial Committee

The BCL is represented at the Economic and Financial Committee (EFC). This consultative committee, established by the Treaty on the Functioning of the European Union (TFEU), is composed of representatives of the Treasuries or Ministries of Finance and the NCBs of European Union Member States, as well as representatives of the European Commission and the European Central Bank (ECB).

The EFC was created in order to promote the coordination of Member States' policies to the full extent needed for the functioning of the internal market. Its mission is:

- to produce opinions either at the request of the Council of the European Union (the Council) or the European Commission, or by its own initiative;

- to provide a framework for dialogue between the Council and the ECB;

- to contribute to the preparation of the work of the Council, specifically to:

  - follow the economic and financial situation of Member States and regularly report on it to the Council and the Commission;
  - contribute to the coordination of economic and fiscal policy;
  - provide information on questions relating to financial markets, exchange rate policy, as well as third countries and international institutions.[110]

In full composition, the EFC convenes with the representatives of EU administrations and NCBs, and with the Commission and the ECB. The topics discussed are the overall economic situation, financial stability and questions relating to the International Monetary Fund (IMF). NCB representatives do not participate in restricted composition meetings. In the latter composition, the EFC also meets in the Eurogroup Working Group[111], in which only senior officials from the Ministries of Finance of the euro area, the Commission and the ECB participate to prepare the work of the Eurogroup. The latter is an informal grouping in which

110 Source: http://www.consilium.europa.eu/fr/council-eu/preparatory-bodies/economic-financial-committee/

111 In French: *le groupe de travail Eurogroupe.*

euro area Ministers of Finance examine questions pertaining to the responsibilities they share regarding the euro.

In full composition, the EFC plays an important role in the preparation of European positions at the G20, the IMF and the Financial Stability Board (FSB)[112]. It also deals with economic policy issues discussed at the informal meetings of the Council of the EU in Economic and Financial Affairs configuration (the informal ECOFIN), to which notably the Governors of the NCBs of EU Member States and the President of the ECB are invited.

In 2017, the EFC held 10 meetings in full composition and convened three times in its Financial Stability Table set-up. In this set-up it includes, in addition to senior representatives from the Ministries of Finance and the NCBs, high-ranking officials from the European Supervisory Authorities (ESAs)[113] and the European Systemic Risk Board (ESRB).

During its full composition meetings, the EFC continued to closely monitor the risks to financial stability in the EU, the progress towards Banking Union - especially with regard to the reduction and sharing of risks - as well as the deepening of the Economic and Monetary Union, the Capital Markets Union, and the Investment Plan (known as the "Juncker Plan").

The EFC comprises various subcommittees that cover the functioning of public debt markets in the EU, the production and circulation of euro coins, and the activities of the IMF[114]. The BCL is a member of this latter subcommittee, the SCIMF, which works to harmonise the positions of EU member states on IMF matters. In 2017, the SCIMF worked on issues related to IMF lending instruments, particularly the revision of the Flexible Credit Line (FCL)[115] and the Precautionary and Liquidity Line (PLL) - as well as the Policy Support Instrument (PSI)[116] and the 15th General Review of Quotas.

The members of the EFC elect a president for a two-year term.

1.10.4 The European Statistical Forum, the Committee on Monetary, Financial and Balance of Payments Statistics and the European Committee of Central Balance Sheet Data Offices

On 24 April 2013, the European Statistical System (ESS) and the ESCB signed a Memorandum of Understanding on the cooperation between the two statistical systems. In order to improve this cooperation, both systems have established the European Statistical Forum in which National Central Banks, National Statistical Institutes, the European Commission and the ECB are represented. This forum will establish an annual work programme with the major objective of improving cooperation between the two systems.

The Committee on Monetary, Financial and Balance of Payments Statistics (CMFB), for its part, continues to deal in depth with cases that fall within the common remit of the two statistical systems. The CMFB is also responsible for deciding on the development and coordination of the categories of statistics required under the policies applied by the European Council, the European Commission and the various committees that assist them. The CMFB represents National Central Banks, National Statistical Institutes, the European Commission and the ECB. Working groups with specific objectives operate under the aegis of this committee.

The European Committee of Central Balance Sheet Offices (ECCBSO), of which the BCL has been a member since 2014, is an advisory body created in 1987 by a group of European Central Banks in charge of the management of national Central Balance Sheet Offices. The Committee's initial objective was to improve the analysis of non-financial corporate data. The Committee's objectives have been extended by central banks in areas such as statistics, economic and financial research, financial stability, supervision and risk assessment to cover the

112 For the IMF and the FSB, see sections 1.11.2 and 1.7.1.1.

113 Namely the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA), and the European Securities and Markets Authority, (ESMA).

114 Namely the Sub-Committee on EU Sovereign Debt Markets, the Euro Coin Subcommittee and the Sub-Committee on IMF and related issues (SCIMF).

115 In French, *la Facilité de crédit rapide (FCR).*

116 In French, *l'Instrument de soutien à la politique économique (ISPE).*

use of data from non-financial corporations. It should be noted that the Institut national de la statistique et des études économiques (STATEC), which is responsible for the Central Balance Sheet Office in Luxembourg, is a member of this committee.

During 2017, the BCL actively contributed to the work carried out in these three forums. Progress has been achieved, notably in the areas of financial accounts, balance of payments, financial services, public finance and national accounts statistics.

1.11 NATIONAL AND EXTERNAL ACTIVITIES

1.11.1 National Activities

1.11.1.1 Relations with the Parliament

On 1 December 2017, the BCL presented to the Financial and Budget Commission of the Luxembourg Parliament its opinion on the government's draft budgetary plan on revenues and expenditures for 2018 and the pluriannual program for the years 2017-2021.

1.11.1.2 BCL Committee Activities

Lawyers Committee

The Lawyers Committee of the BCL met four times in 2017. It discussed various subjects relating to the Eurosystem, such as: (i) the Luxembourg law dated 5 December 2016 on "Private enforcement", (ii) the judgement of the Court of Justice of the EU dated 20 September 2016 on the restructuring of the Cypriot banking sector, (iii) the judgement of the General Court of the EU dated 17 May 2017 which dismisses the action brought by the *Landeskreditbank Baden-Württemberg* against the decision of the ECB to submit the former to the direct supervision of the ECB, and (iv) the European Master Agreement (EMA).

Advisory Commission on Banking and Monetary Statistics

The *Commission consultative Statistiques bancaires et monétaires* (CCSBM), set up by the BCL, aims to ensure efficient collection of banking and monetary statistics by the BCL and to establish a dialogue with the credit institutions subject to statistical reporting. During 2017 the CCSBM was informed and consulted on various conceptual issues relating to the change in the statistical collection from credit institutions, in particular with regard to the introduction of granular collection on credit and credit risk (ECB AnaCredit Project).

Operational Crisis Prevention Group

The BCL established in 2007 the Operational Crisis Prevention Group (OCPG) with the mandate of enhancing the financial sector's preparation with regards to large scale operational disruptions.

Members and participants in meetings include the ABBL, the CSSF and systemically important financial institutions and market infrastructures established in Luxembourg.

In 2017, the Group reviewed its objectives and work-plan. They take into consideration the new legal framework (including the law establishing the High Commission for National Protection) and the evolution of the operational landscape, in particular raising the importance of cyber-security.

1.11.1.3 Activities of external committees in which the BCL participates

The Economic Committee (Comité de conjoncture)

The Economic Committee acts within the framework of the legislation authorising the government to take measures to prevent redundancies for cyclical and structural reasons and to stabilise employment. The Committee contributes to the analysis of the Luxembourg economy and to the monitoring of topical economic policy issues.

The BCL's contribution to the Economic Committee is twofold: first, the BCL collects information on Luxembourg's economic situation and, second, BCL provides information on the latest developments in the financial sector and in monetary areas.

The Consumer Price Index Commission (Commission de l'indice des prix à la consommation)

The BCL participates as an observer in the meetings of the Consumer Price Index Commission, which is in charge of advising and assisting STATEC in the compilation of consumer price indices. The Commission also issues technical opinions on the development of the monthly consumer price index and supervises the compliance of this index with national and European legislation. The BCL presents its inflation projections for Luxembourg to the CPIC and explains the BCL's work in the area of consumer prices.

Accounting Standards Board

Since October 2013, the BCL is a member of the Accounting Standards Board (Commission des normes comptables, hereafter the "CNC").

The CNC is an economic interest grouping (groupement d'intérêt économique) whose role is to:

- provide accounting advice to the Government;
- contribute to the development of an accounting doctrine;
- participate in discussions on accounting matters within European and international bodies. In 2014, the CNC became member of the EFRAG - European Financial Reporting Advisory Group as the Luxembourg representative;
- assume missions entrusted to it by the law of 30 July 2013 reforming the CNC and modifying various provisions relating to companies' accounting and annual accounts, as well as to the consolidated accounts of certain forms of companies.

During 2017, the CNC (the management committee and working groups) met on 39 occasions.

Four questions/answers which could be found on CNC's website (http://www.cnc.lu/publications/doctrine/) have been published. These questions/answers intend to deal with accounting and reporting issues that practitioners encounter.

The revision of the Standard Chart of Accounts (Plan comptable normalisé) which began in 2015 continued at a steady pace (21 meetings) and was finalised during the second half of 2017. A proposal for a draft Grand Ducal Regulation was submitted to the Minister of Justice.

During 2017, the CNC received 34 individual derogation requests in application of Article 27 of the amended law of 2002. Furthermore, the reflection initiated in 2016 regarding the future of the derogation granted in respect of Article 27 of the amended law of 2002, continued in 2017 and should lead to the formulation of recommendations to the attention of the Minister of Justice during 2018.

In addition, the CNC also took part in the work of the EFRAG Board through the participation of its chairman. In the context of the membership rotation of the EFRAG Board, this mandate was completed on 1 November 2017.

Committee comptabilité bancaire

The *Committee Comptabilité Bancaire*, set up by the *Commission de surveillance du secteur financier (CSSF)*, aims at ensuring an exchange of views between the supervisory authority, the BCL and the stakeholders of the Luxembourg financial centre. The CSSF consults the committee when drafting circulars concerning bank accounting issues.

Higher Statistical Council

The *Conseil supérieur de la statistique* (CSS) acts in an advisory capacity for STATEC and issues an opinion on its annual programme. To this end, STATEC shall submit to the High Council for Statistics, at the end of each year, a report on the work accomplished during the previous year and a programme of work to be carried out during the coming year. The report and the programme are the subject of an opinion of the High Council for Statistics.

The BCL contributes to the work of the *Conseil supérieur de la statistique*, in particular by providing its opinion on the documents submitted to it. It also provides STATEC with data collected on the financial centre to enable it to carry out its work programme.

Committee on Public Statistics

The *Comité des statistiques publiques* (CSP) has a coordinating role in the field of government statistics. Thus, it draws up an inventory of all surveys in the Luxembourg statistical system, analyses the possibilities of satisfying requests from existing sources and ensures the implementation of the statistical programme in compliance with the good practices of the Luxembourg statistical system and the relevant international standards.

The BCL regularly participates in the work of this Committee as an observer.

XBRL Luxembourg

eXtensible Business Reporting Language (XBRL) is a financial reporting standard based on Extensible Markup Language (XML) whose main objective is to improve the correctness, transparency and efficiency of internal and external reporting. The non-profit association XBRL Luxembourg brings together about twenty organisations that use XBRL or provide services related to this standard. The role of the association is to promote the XBRL standard in the Luxembourg economy.

The BCL, as a founding member of XBRL Luxembourg, is studying the possibilities of using this standard in the framework of the statistics it collects from companies in the Luxembourg financial sector.

1.11.2 External activities

Activities at the IMF level

The IMF's Executive Board is composed of 24 Executive Directors. Since 1 November 2012, Luxembourg has acted as a Senior Advisor in a group of countries (Constituency) led by a Belgian or Dutch Executive Director in four-year, alternating turns. Aside from the Benelux countries, the 12 other members of the constituency are, in decreasing order of their quotas: Ukraine, Israel, Romania, Bulgaria, Croatia, Cyprus, Bosnia and Herzegovina, Georgia, Moldova, Macedonia, Armenia and Montenegro.

Member states' quota subscriptions are an essential component of the IMF's financial resources. They correspond broadly to a country's relative position in the world economy. Since January 2016, after the entry into force of the 14th General Review of Quotas, Luxembourg's quota has been set at SDR 1 321.8 million.

To supplement its quota resources, the IMF can also borrow temporarily through the New Arrangements to Borrow (NAB) or through bilateral credits from those of its members willing to lend to the Fund on a voluntary basis. Since February 2016, Luxembourg's participation in the NAB has been SDR 493.12 million. At the end of the year, loans provided by Luxembourg under the NAB reached SDR 54.50 million.

In addition, since 2012 – and given the delays in approving the 14th General Review of Quotas – a certain number of member countries, mainly European, also pledged to increase the IMF's resources by an equivalent of US$ 461 billion through bilateral borrowing agreements. Luxembourg contributed to this effort by signing a bilateral loan agreement to the benefit of the IMF for € 2.06 billion in April 2014. This line of credit initially had a two-year maturity, but after two extensions of one year each, it was scheduled to mature in

April 2018. In April 2017, however, Luxembourg signed a new € 2.06 billion bilateral loan agreement that will mature on December 31, 2019, or at the latest 12 months later, and which replaced the 2014 agreement.

The BCL handles Luxembourg's financial transactions with the IMF. It holds Luxembourg's assets and liabilities with regard to the IMF in both the General Resources Account (GRA) and the SDR account. Luxembourg's quota is recorded in full on the BCL's balance sheet. On 31 December 2017, Luxembourg's reserve position – i.e. the difference between Luxembourg's quota and the IMF's holdings of euro denominated assets at the BCL – was SDR 129.11 million, equivalent to 9.77% of Luxembourg's quota. At the same point in time, Luxembourg held SDR 245.62 million, or 99.59% of its SDR allocation, compared to 99.19% at the end of 2016.

The Financial Transactions Plan (FTP) of the IMF defines the currencies to be made available to its members and the distribution of reimbursements among its members on a quarterly basis. In view of its strong external position, Luxembourg is generally among the countries designated by the IMF's Executive Board to be part of the FTP in order to make available to the IMF, if requested, foreign currencies intended for countries using IMF resources.

Activities at the Bank for International Settlements (BIS) level

The Bank for International Settlements (BIS) promotes international cooperation between monetary authorities and financial sector supervisory authorities through meetings that it organises for these institutions' officials. Through the Basel Process framework, it also hosts at its headquarters international groups pursuing global financial stability, including the Basel Committee on Banking Supervision and the Financial Stability Board. The BIS supports them, facilitates their interaction, and helps set international standards in banking. Sixty central banks and monetary authorities from advanced and emerging countries are members of the BIS.

The BCL is closely involved in the activities of various committees and working groups of the BIS[117]. The BCL is also represented by its Governor at the Global Economy Meeting and at the All Governors' Meeting, which both take place every two months, generally at the headquarters of the BIS in Basel. The Governors and other senior officials from BIS member central banks examine recent developments and prospects of the global economy and financial markets. They also exchange views and experiences on subjects of interest to central banks.

The economic debates focus on the macroeconomic and financial situation in developed and emerging economies. Over the past year, the Global Economy Meeting addressed, inter alia, the following subjects: risks of downturn in the major bond markets, inflation targets, growth, and the appropriate mix of monetary, fiscal, and structural policies.

During the year under review, the All Governors' Meeting addressed topics such as intervention in the foreign exchange markets, risk of cybercrime or hacking of sensitive information systems and the problems it poses to central banks, improving economic resilience, macroeconomic implications of global value chains, and the risks of the use of the dollar as a global intermediary currency.

Furthermore, the BCL also participates in the Committee on the Global Financial System (CGFS) and in the Annual General Meeting of the BIS.

The CGFS monitors financial market developments for Governors attending the Global Economy Meeting. The mandate of the CGFS is to identify and assess sources of risk in global financial markets, deepen understanding of the structural underpinnings of these markets, and promote improvements in their functioning and stability.

117 The major BIS committees and working groups are: The Financial Stability Board, the Group of Central Bank Governors and Heads of Supervision, the Basel Committee on Banking Supervision, the Committee on the Global Financial System, the Committee on Payments and Market Infrastructures, the Markets Committee, the Central Bank Governance Group, the Irving Fisher Committee on Central Bank Statistics, the International Association of Insurance Supervisors and the International Association of Deposit Insurers.

1.12 EUROSYSTEM PROCUREMENT COORDINATION OFFICE (EPCO)

In 2007, the Governing Council of the European Central Bank (ECB) designated the BCL to host the Eurosystem Procurement Coordination Office (EPCO), with the objective of coordinating procurement of goods and services of the central banks of the ESCB that are necessary for the performance of Eurosystem tasks.

The mandate of BCL to host EPCO has been established until 31 December 2019, with the possibility of a renewal.

According to the terms of the ECB Decision laying down the framework for joint Eurosystem procurement[118], EPCO's main task is the identification and coordination of cases of joint procurement that are likely to bring benefits or where there is a need for harmonisation of goods and services for the central banks[119], as well as other eligible institutions[120] which could have interest in participating in EPCO's activities.

To achieve these objectives, EPCO has continued to focus its activities on the identification and coordination of joint procurement procedures of interest for the participating central banks, as well as on the management and promotion of agreements concluded for the benefits of its members.

EPCO's procurement programme, approved by the Governing Council, includes IT goods and services, market data services, consultancy and training services, air transport and hotel services and banknote related items. In 2017, as part of its missions, EPCO coordinated 15 joint procurement procedures. For each procedure, one "Lead Central Bank" is nominated for its implementation in coordination with EPCO.

As part of the studies and exchange of information carried out in collaboration with the networks of experts from the Central Banks participating in EPCO, ten new joint procurement opportunities were identified.

The 25 framework agreements in place resulting from the joint procurement procedures have generated considerable financial and administrative benefits for the Central Banks and EPCO's participating institutions.

Moreover, EPCO continued to facilitate the exchange and development of best practices, in collaboration with its experts' networks, thus promoting a reinforced cooperation in the area of public procurement within the ESCB.

The execution of the EPCO budget in 2017 (part of a multi-annual financial envelope) has proven to be lower than the budget initially allocated.

118 Decision of the European Central Bank of 17 November 2008 laying down the framework for joint Eurosystem procurement (ECB/2008/17) (2008/893/EC) as modified by Decision ECB/2015/51.

119 In 2017 EPCO regrouped in total 23 central banks: 19 central banks of the Eurosystem participated in EPCO's activities, as well as four central banks that are not part of the euro-zone. Discussions have been held with other central banks of the ESCB expressing an interest for future participation with EPCO.

120 Since 2016, certain institutions that are not part of the ESCB can take part in EPCO's procurements under the conditions defined by the Decision ECB/2008/17.

02 THE BCL AS AN ORGANISATION

Robert Brandy: *Everything is changing*, BCL Collection

2 THE BCL AS AN ORGANISATION

2.1 CORPORATE GOVERNANCE

2.1.1 The Council

Article 6 of the Founding Law of 23 December 1998 defines the powers of the Council of the Bank. In 2017, the Council consisted of the following members:

President:	Mr Gaston Reinesch
Members:	Mr Pierre Beck
	Mr Pit Hentgen
	Mr Jacques F. Poos
	Ms Simone Retter
	Mr Romain Schintgen
	Mr Roland Weyland
	Mr Michel Wurth
	Mr Claude Zimmer

During 2017, the Council held six meetings. The Council approved the financial accounts as per 31 December 2016, the budget orientations and subsequently the budget for the 2018 financial exercise.

Audit Committee

Since 2001, the Audit Committee, composed of members of the Council, assists the BCL Council in selecting the statutory auditor to be proposed to the Government, in determining the scope of the specific controls to be performed by the statutory auditor and in the approval of the financial accounts by the Council. The Audit Committee is informed of the internal audit plan. It may invite the head of Internal Audit and the BCL's statutory auditor in its work.

At its meeting on 15 December 2017, the Council appointed the members of the Audit Committee for the 2018 financial year: Mr Pit Hentgen, Mr Romain Schintgen and Mr Claude Zimmer. The Audit Committee, which was chaired by Mr Claude Zimmer in 2017, met four times.

2.1.2 The Governor

His Royal Highness Grand-Duke Henri of Luxembourg, based on a proposal by the Government in Cabinet, appointed Mr Gaston Reinesch as the Director-General (Governor) of the BCL for a six-year period as of 1 January 2013.

2.1.3 The Executive Board

The Executive Board is the superior executive authority of the BCL. It takes the decisions and draws up the measures necessary for the BCL to carry out its tasks.

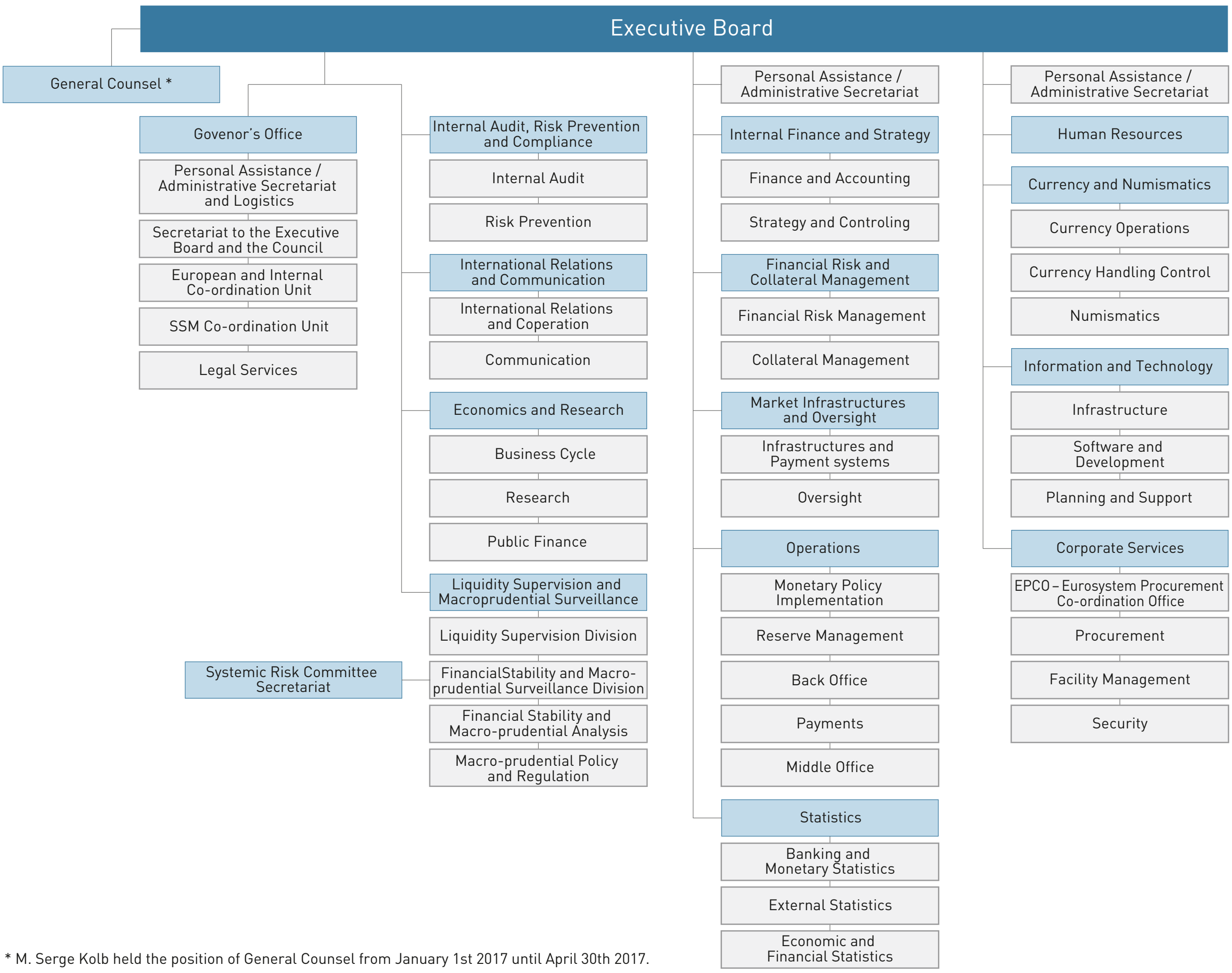
Without prejudice to the independence of the Director-General from instructions in his capacity as a member of the Governing Council of the ECB, the decisions of the Executive Board shall be taken collectively.

The Executive Board consists of a Director-General and two Directors. The composition consists of the following members as of 31 December 2017:

Director-General: Mr Gaston Reinesch
Directors: Mr Pierre Beck and Mr Roland Weyland

The members of the Executive Board receive a salary according to the wage scale in the public sector as well as different allowances. The remuneration components are subject to the current legal tax rates (i.e. the progressive tax rate) in Luxembourg.

2.1.4 Organisation Chart as of 31 December 2017



* M. Serge Kolb held the position of General Counsel from January 1st 2017 until April 30th 2017.

2.1.5 Internal control and risk management

The BCL's internal control and risk management system is based on generally accepted principles in the financial sector and within the European System of Central Banks and the Single Supervisory Mechanism (ESCB/SSM), taking into consideration the specific central banking activities.

The Executive Board has defined the general framework and the principles of the internal control system, which is based on the three lines of defense model. Responsibility for the effective operation of the internal control rests with the management and its employees.

Some functional verifications are performed by specific administrative units to ensure segregation of duties appropriate to the BCL's activities. These units are the Financial Risk Management and Collateral Management sections, the Risk Prevention section as well as the Controlling function:

- The Financial Risk Management section is responsible for the analysis of financial risks, of the sur¬veillance of the implementation of decisions taken by the internal committees and by the Executive Board, of the surveillance of the investment limits and of the issuance of regular reports on these aspects;

- The Collateral Management section is entrusted with the risk management responsibility in the field of collateral, and in particular for ABS (asset-backed securities);

- The Risk Prevention section is in charge of the surveillance of operational risks, of risks related to informa¬tion systems and of non-compliance risks.

While operational departments are responsible for identifying the risks associated with their activities and for putting in place appropriate measures to mitigate these risks, the Risk Prevention section has the following responsibilities:

  - establish a common methodology for risk analysis;
  - provide assistance in the identification and evaluation of risks;
  - ensure periodical reporting on the residual operational risks.

  The Risk Prevention section is also in charge of coordinating the Business Continuity Plan and the related testing.

  The Compliance function, which is administratively attached to the Risk prevention section, aims to identify, assess and monitor the risk of non-compliance within the BCL.

  The Compliance function's role is to intervene in the following areas:

  - anti-money laundering (AML) and financing of terrorist activities,
  - professional code of ethics,
  - prevention of market abuse,
  - conflicts of interests,
  - professional secrecy and confidentiality,
  - privacy and protection of personal data,
  - regulation of public markets.

- The Controlling function provides assurance that available resources are used effectively and that any misuse is detected without delay. It ensures the proper functioning of the budgetary procedure and it supervises the execution of the budget. It reports on a regular basis on the follow-up thereof.

For its part, the Internal Audit unit is in charge of the independent and objective evaluation of the internal control system and its functioning. The Internal Audit unit is independent from the other administrative units and reports directly to the President of the Council.

The Internal Audit unit complies with internationally accepted profes¬sional standards, as applied by the ESCB/SSM. The annual internal audit plan includes audit engagements on a national level, as well as audits that are coordinated by the Internal Auditors Committee, in compliance with the ESCB/SSM audit charter. The Internal Audit unit may issue recommendations to be implemented by the entities in charge. The Internal Audit follows-up on the implementation of its recommendations.

Finally, the Audit Committee is informed about the internal control and risk management framework and its functioning.

2.1.6 External control

In accordance with article 15 of the organic law of the BCL, the statutory auditor, appointed by the Government for a period of five years, is responsible for verifying and certifying the accuracy and completeness of the BCL's accounts. Moreover, the external auditor is mandated by the Bank's Council to perform additional reviews and specific controls.

At European level, the BCL's statutory auditor's nomination is approved by the Council of Ministers of the EU, upon recommen¬dation of the Governing Council of the ECB. In this context, the statutory auditor is also entrusted with the performance of specific engagements at Eurosystem level.

Deloitte Audit S. à r. l. Luxembourg was granted the mandate of statutory auditor of the BCL for the financial years 2014 to 2018, at the end of the appointment and approval process provided for by the Statute of the ESCB and of the ECB (Article 27.1).

2.1.7 Codes of Conduct

A Code of Conduct defining internal and external rules of conduct is applicable to all BCL staff. Without prejudice to the provisions of civil service legislation, social legislation and existing contractual commitments, this Code provides for ethical standards of non-discrimination, integrity, independence and professional secrecy, to which all adressees have to strictly adhere. The Code of Conduct was updated in 2017, in particular to take account of two ECB guidelines on ethics.

The application of the Code of Conduct, in respect of the Director General, at his request, has been further strengthened at his own expense. Furthermore, in order to avoid any suspicion of conflict of interest in connection with his function as a member of the Governing Council of the ECB, the Director General does not participate in the BCL investment committees responsible for managing the BCL's portfolios. In addition, as regards the latter, the Director General does not take part in the deliberations of the Executive Board of the BCL. His responsibilities are limited, as the President of the Council, to those of an administrator.

Moreover, the ECB requires the Members of the Governing Council to adhere individually to its Code of Conduct, which provides for high standards of professional and ethical conduct. The members of the Governing Council shall act with honesty, independence, impartiality and discretion, disregard their personal interests and avoid any situation which might give rise to a personal conflict of interest. These duties shall continue to apply for one year after they cease to hold office. The conditions for accepting gifts or other benefits are specified, as are the conditions for attending conferences, receptions or cultural events.

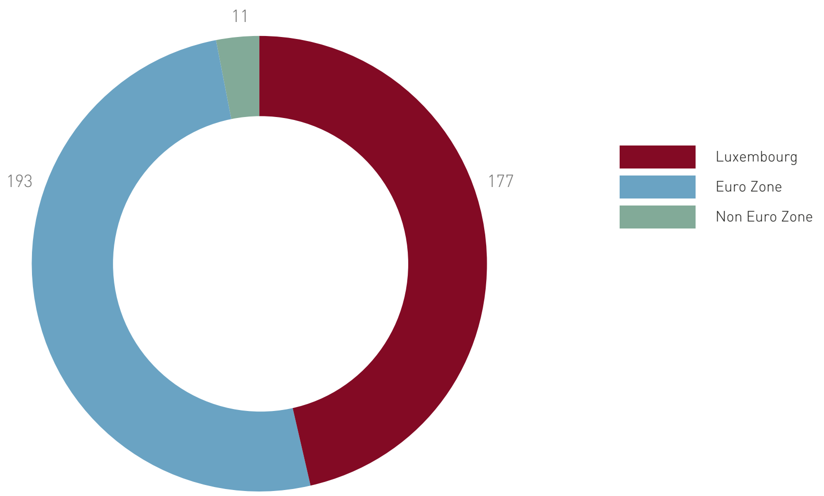
The Governors are advised to exercise particular caution with respect to individual invitations. The same rules apply to their spouses or partners who are equally obliged to respect the generally accepted practices concerning inter¬national relations. Any activities outside the ESCB of the members of the Governing Council are also strictly regulated. Finally, they are required not to disclose confidential information or use it in private financial transactions, either directly or through third parties.

2.2 HUMAN RESOURCES

2.2.1 Evolution of the workforce

As of 31 December 2017, BCL had 381 employees, representing 366.25 full-time equivalents. This workforce consisted of 19 different nationalities, a source of enrichment of the human capital of the institution.

Graph 18:
Distribution of staff by nationality



The BCL is undergoing a gradual renewal of its teams: 28 entries against 9 exits and 3 retirements during the year 2017.

2.2.2 Human Resources Management

In 2017, a review of all processes underlying the action of Human Resources was started, aiming to increase efficiency, redefine procedures and modernise processes and information systems. The BCL has also sought to increase its visibility as an employer, particularly through partnerships. The year 2017 was also an opportunity for the members of the Human Resources Department to welcome their counterparts from the Eurosystem central banks in order to discuss the positioning of the HR function within the central banks.

The BCL has also begun to reflect on the policy of encouraging the performance and development of its employees and has offered them training and mobility opportunities.

2.2.3 Pension fund of the BCL

Due to the special status reserved by the legislator for the BCL, the latter set up a pension fund to finance the statutory pension commitments (1st pillar) of its staff in 2001. The BCL affiliates to this fund agents of different statutes in accordance with the provisions of its organic law.

The pension fund is set up within the Bank and is managed independently. To guarantee its financial situation is fully transparent, the pension fund has its own accounting system, with its assets and liabilities identified on the BCL balance sheet.

To ensure its good governance, the pension fund is steered by a Steering Committee, which designates the participants in charge of the fund's day-to-day management and validates the strategic orientations and general principles governing the fund's investment and cash management policy. These strategic orientations are proposed to the Steering Committee by an advisory body, the ALCO Committee.

Since the State does not intervene in financing the statutory pensions (1st pillar) of BCL staff, the pension fund is funded exclusively by, on the one hand, pension deductions made from staff salaries in accordance with the rules of the pension scheme applicable to them according to their status and, on the other hand, by payments made by the Bank itself.

2.3 INTERNAL FINANCE AND STRATEGY

2.3.1 Accounting and reporting

The BCL regularly updates its accounting system and its procedures in order to meet the quality standards of the Eurosystem. As in previous years, the BCL has participated in the Working Groups on ESCB's financial framework and has transposed the accounting revisions accordingly.

The Eurosystem imposes specific harmonised rules on the daily reporting of balance sheet data by each central bank.

The control systems are adapted to changes in the operations carried out during the period under review.

The BCL regularly checks the development of balance sheet items, off-balance-sheet items and the profit and loss accounts. Investments, revenues and expenses are monitored particularly closely with special attention to the correct execution of signing powers.

The monthly balance sheet of the BCL is published on its website.

The management information system, in the form of dashboard reports, meets the continuous need to follow the Bank's activities. These tables include all activities of the Bank. The BCL strictly monitors the development of the interest margin and compares the profitability of its investments to set benchmarks.

The BCL's decision-making bodies are regularly informed of the results of these activities in order to be able to determine future targets and actions.

2.3.2 Budget

The preparation of the budget, in accordance with the Organic Law of the BCL, is part of the multi-year results planning framework, the primary aim of which is to ensure long-term financial equilibrium. The budget also determines the upper threshold of operational and investment expenses that the BCL may incur during a financial year.

The 2017 budget of the BCL was prepared in accordance with the budget procedure and guidelines set out by the BCL's Council on 8 July 2016. It was approved by the Council of the BCL on 16 December 2016.

In particular, it incorporates the following key elements:

- the Eurosystem's unconventional monetary policy operations were prolonged in 2017 with an impact on the BCL's business volume;
- the Eurosystem's key interest rates remain at historically low levels, which has a negative impact on the BCL's net income;
- at Eurosystem level, cooperation continues through the continuous consolidation of production systems in operation, a significant number of joint projects and joint procurement procedures between national central banks under the aegis of the Eurosystem Procurement Coordination Office;
- at national level, the tasks to be carried out also continue to grow, in particular in macro-prudential supervision, the oversight of payment systems and securities settlement as well as statistical data collection. The activities of the Systemic Risk Committee, for which the BCL provides the secretariat, are under development, which generates an additional burden for the BCL;
- the BCL must fill a significant number of vacancies, which implies that recruitment remains paramount. In view of the development of its activities, an additional reinforcement of staff is necessary;
- the BCL continued its additional contributions to the Bank's pension fund and to the general risk provisions;
- historically low interest rates combined with a constantly increasing workforce make it increasingly difficult to cover operating expenses with recurring income.

The Internal Finance and Strategy Department oversees budget execution and prepares quarterly reports for the Executive Board. At the end of each financial year, a detailed gap analysis of the budgeted vs. the actual expenditure is elaborated. This analysis is submitted to the Executive Board and Council of the Bank for information and approval. The conclusions that can be drawn are taken into account in the preparation of future budgets.

As of 31 December 2017, operating and investment expenses were below budget.

2.3.3 Strategic Planning and Management Control

The purpose of Management Control is to strengthen efficiency and accountability within the BCL, allowing the Executive Board to focus more on strategic decisions. To this end, Management Control assists the Executive Board by providing quantitative and qualitative analyses that are useful for decision-making.

Through its Project Management Office (PMO) function, Management Control is responsible for coordinating and prioritising projects and managing the BCL's project portfolio. The PMO assists the BCL's Internal Steering Committee (BISC) and the Executive Board in the preparation of project-related decisions. In 2017, the PMO team focused on project governance and portfolio management as well as on redesigning the methodological framework.

The BISC, whose secretariat is provided by Management Control, monitors the progress of all ongoing projects as well as the launch of new projects. The Overall Project Monitoring Reports (OPMR), prepared by Management Control on the basis of individual project progress reports, enables the BISC to better monitor the progress of individual projects and to ensure communication with the Executive Board on project-related matters.

In addition, the BCL also participated in a series of project controlling activities at the Eurosystem/ESCB level in connection with the preparation and monitoring of joint projects and the underlying methodology.

Cost accounting, as an integral part of the Management Control function, identifies, analyses and monitors the costs associated with each activity (Activity Based Costing). In addition, it is used to establish financial figures for the invoicing of services provided. The methodology used is compliant with the harmonised set of rules determined at Eurosystem level. It consists in allocating the BCL's operating expenses according to their purpose, i.e. to the entities concerned, and determining the expenses inherent to each of BCL's activities.

To facilitate the planning and monitoring of the use of the necessary resources, the BCL has at its disposal an analysis tool for measuring and evaluating the allocation of human resources and material for the various missions of a central bank. Combined with the cost accounting system, it enables the Executive Board to better monitor the Bank's operational performance. In addition, reports containing both financial and operational indicators establish, on the one hand, the correspondence between tasks and activities and, on the other hand, the strategic orientations and objectives defined.

As the BCL continues to develop its activities, a more comprehensive medium and long-term planning remains a necessity. Strategic planning efforts are being strengthened to ensure optimal alignment of the BCL with the current economic, financial and institutional environment. In order to monitor its capital adequacy in the context of its financial independence, the BCL makes regular projections of its long-term financial situation. It carries out forward-looking analyses based on internal factors, such as costs and revenues, as well as external factors such as interest rates, exchange rates and other variables relating to the Eurosystem and the economic environment.

2.4 FINANCIAL STATEMENTS

Preamble

Only the French version of the present financial statements has been reviewed by the Independent Auditor. Consequently, the present financial statements only refer to the French version of the financial statements; other versions result from a conscientious translation made under the responsibility of the Executive Board. In case of differences between the French version and this translation, only the French version is legally binding.

2.4.1 Key figures as of year-end (in euro)

	2017	2016	Change in % 2017/2016
Total assets	207 562 911 982	200 850 919 830	3
Liabilities to credit institutions	102 875 299 078	97 433 067 129	6
Lending to credit institutions	5 632 440 000	4 907 440 027	15
Own funds [1], revaluation accounts, administrative provisions and specific banking risks provisions	1 268 035 526	1 300 725 096	-3
Net result from banking activities [2]	414 997 346	295 856 554	40
Net result from banking activities adjusted by net monetary income allocation	85 197 776	78 089 666	9
Total net income	80 453 167	83 068 393	-3
Administrative expenses	72 516 592	75 101 535	-3
Net profit	1 960 764	1 810 813	8
Staff	378	360	5
BCL's weighting in the capital of the ECB	0.2030%	0.2030%	
BCL's weighting in lending to credit institutions related to monetary policy operations	0.737%	0.823%	

[1] Capital, reserves, provisions for general banking risks and net profit to be allocated to the reserves
[2] Net ajusted interest income, net result from fees and commissions, net result on financial operations

2.4.2 Report of the Réviseur d'Entreprises agréé

Opinion

We have audited the financial statements of Banque centrale du Luxembourg, which comprise the balance sheet as at December 31, 2017, and the profit and loss account for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements are regular and fair and give a true and fair view of the financial position of Banque centrale du Luxembourg as at December 31, 2017, and of the results of its operations for the year then ended in accordance with generally accepted accounting principles and those defined by the European System of central banks.

Basis for Opinion

We conducted our audit in accordance with the Law of 23 July 2016 on the audit profession (Law of 23 July 2016) and with International Standards on Auditing (ISAs) as adopted for Luxembourg by the "Commission de Surveillance du Secteur Financier" (CSSF). Our audit was carried out by considering generally accepted accounting principles in Luxembourg as well as the accounting specificities applicable within the System of European Central Banks. Our responsibilities under those laws and standards are further described in the "Responsibilities of the "Réviseur d'Entreprises Agréé" for the Audit of the financial statements" section of our report. We are also independent of the Banque centrale du Luxembourg in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) as adopted for Luxembourg by the CSSF together with the ethical requirements that are relevant to our audit of the financial statements, and have fulfilled our other ethical responsibilities under those ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Directors' responsibilities for the financial statements

The financial statements are prepared by the Directors and are approved by the Council. The Directors are responsible for the preparation and fair presentation of these financial statements in accordance with generally accepted accounting principles and those defined by the European System of Central Banks, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for using the going concern basis of accounting.

Responsibilities of the "Réviseur d'Entreprises Agréé" for the Audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue a report of the "Réviseur d'Entreprises Agréé" that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Law of 23 July 2016 and with ISAs as adopted for Luxembourg by the CSSF will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with the Law of 23 July 2016 and with ISAs as adopted for Luxembourg by the CSSF, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Banque centrale du Luxembourg's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors.

- Conclude on the appropriateness of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Banque centrale du Luxembourg's ability to continue as a going concern. If we concluded that a material uncertainty exists, we are required to draw attention in our report of the "Réviseur d'Entreprises Agréé" to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our report of the "Réviseur d'Entreprises Agréé".

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

For Deloitte Audit, Cabinet de Révision Agréé

Martin Flaunet, *Réviseur d'Entreprise Agréé*
Partner

March 14, 2018

2.4.3 Balance sheet as at 31 December 2017

ASSETS	Notes	2017 EUR	2016 EUR
Gold and gold receivables	3	78 133 143	79 341 312
Claims on non-euro area residents denominated in foreign currency	4	654 133 058	843 295 653
- Receivables from the IMF	4.1.	509 900 086	662 048 036
- Balances with banks, security investments, external loans and other external assets	4.2.	144 232 972	181 247 617
Claims on euro area residents denominated in foreign currency	5	1 415 921 242	1 336 829 690
Claims on non-euro area residents denominated in euro	6	493 805 352	805 947 591
- Balances with banks, security investments and loans		493 805 352	805 947 591
Lending to euro area credit institutions related to monetary policy operations denominated in euro	7	5 632 440 000	4 907 440 027
- Main refinancing operations	7.1.	–	800 000 000
- Longer-term refinancing operations	7.2.	5 632 440 000	4 107 440 000
- Marginal lending facility	7.5.	–	27
Other claims on euro area credit institutions denominated in euro	8	430 223 045	320 107 567
Securities of euro area residents denominated in euro	9	6 307 769 313	4 653 662 908
- Securities held for monetary policy purposes	9.1.	5 721 670 418	3 543 927 349
- Other securities	9.2.	586 098 895	1 109 735 559
Intra-Eurosystem claims	10	191 952 175 637	187 320 186 464
- Participating interest in the ECB	10.1.	36 396 638	36 396 638
- Claims equivalent to the transfer of foreign reserves to the ECB	10.2.	117 640 617	117 640 617
- Other claims within the Eurosystem	10.3.	191 798 138 382	187 166 149 209
Other assets	11	598 311 192	584 108 618
- Tangible and intangible assets	11.1.	57 248 337	59 870 857
- Other financial assets	11.2.	451 680 164	441 446 178
- Accruals and prepaid expenses	11.3.	79 375 282	80 619 900
- Sundry	11.4.	10 007 409	2 171 683
Total assets		**207 562 911 982**	**200 850 919 830**

The accompanying notes form an integral part of the financial statements.

LIABILITIES	Notes	2017 EUR	2016 EUR
Banknotes in circulation	12	3 108 250 980	2 990 103 480
Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	13	102 875 299 078	97 433 067 129
- Current accounts (covering the minimum reserve system)	13.1.	60 489 399 078	60 290 467 129
- Deposit facility	13.2.	42 385 900 000	37 142 600 000
Liabilities to other euro area residents denominated in euro	14	2 803 067 555	2 758 368 960
- General government	14.1.	809 375 261	843 165 095
- Other liabilities	14.2.	1 993 692 294	1 915 203 865
Liabilities to non-euro area residents denominated in euro	15	807 205 982	716 136 021
Liabilities to non-euro area residents denominated in foreign currency	16	1 394 622 755	1 335 556 066
Counterpart of special drawing rights allocated by the IMF	17	292 888 832	314 344 986
Intra-Eurosystem liabilities	18	94 582 973 510	93 600 099 230
- Net liabilities related to the allocation of euro banknotes within the Eurosystem	18.1., 12	94 582 973 510	93 600 099 230
Items in course of settlement		67 410	67 410
Other liabilities	19	42 986 383	36 381 452
- Accruals and income collected in advance		35 727 602	18 982 015
- Sundry		7 258 781	17 399 437
Provisions	20	1 338 194 021	1 299 922 166
- Provision for banking risks	20.1.	950 691 664	933 683 166
- Provision for pensions	20.2.	387 315 357	366 070 000
- Other provisions		187 000	169 000
Revaluation accounts	21	121 691 906	173 170 124
Capital and reserves	22	193 702 806	191 891 993
- Capital	22.1.	175 000 000	175 000 000
- Reserves	22.2.	18 702 806	16 891 993
Profit for the year	40	1 960 764	1 810 813
Total liabilities		**207 562 911 982**	**200 850 919 830**

The accompanying notes form an integral part of the financial statements.

2.4.4 Off-balance sheet as at 31 December 2017

	Notes	2017 EUR	2016 EUR
Securities received as collateral	23	133 757 720 885	122 356 265 453
Foreign currency reserve assets managed on behalf of the ECB	24	365 247 152	412 511 469
Futures - Purchases	25	-	62 800 000
Futures - Sales	25	-	88 100 000

The accompanying notes form an integral part of the financial statements.

2.4.5 Profit and loss account for the year ending 31 December 2017

	Notes	2017 EUR	2016 EUR
Interest income	26	426 820 087	313 552 785
Interest expense	26	(34 036 416)	(25 700 277)
Net interest income	26	**392 783 671**	**287 852 508**
Realised gains/(losses) arising from financial operations	27	23 536 156	10 335 854
Write-downs on financial assets and positions	28	(687 761)	(879 423)
Transfer (to)/from provisions for risks	29	(16 827 884)	(5 535 017)
Net result of financial operations, write-downs and risk provisions		**6 020 511**	**3 921 414**
Fees and commissions income	30	9 687 004	9 255 958
Fees and commissions expense	30	(10 321 724)	(10 708 343)
Net result from fees and commissions	30	**(634 720)**	**(1 452 385)**
Income from participating interests	31	4 724 676	4 282 553
Net result of pooling of monetary income	32	(329 799 570)	(217 766 888)
Other income	33	7 358 599	6 231 191
Total net income		**80 453 167**	**83 068 393**
Staff costs	34	(42 491 348)	(39 318 938)
- Gross salaries		(40 455 012)	(37 060 345)
- Other staff costs		(2 036 336)	(2 258 593)
BCL's contribution to the legal pension scheme	35	(11 256 836)	(19 090 636)
Other administrative expenses	36	(15 762 401)	(13 653 425)
Depreciation of tangible and intangible assets	11.1., 37	(5 975 811)	(6 156 045)
Banknote production services	38	(1 132 056)	(1 430 217)
Other expenses	39	(1 873 951)	(1 608 319)
Result of the year	40	**1 960 764**	**1 810 813**

The accompanying notes form an integral part of the financial statements.

2.4.6 Notes to the financial statements as at 31 December 2017

NOTE 1 - GENERAL INFORMATION

The Banque centrale du Luxembourg ("the BCL" or "the Bank") was founded in accordance with the law of 22 April 1998. The Founding Law of 23 December 1998 as modified, stipulates that the main task of the BCL shall be to contribute to the exercise of the tasks of the European System of Central Banks (ESCB) so as to achieve the objectives of the ESCB. The BCL is also responsible for the oversight of the general market liquidity situation and the evaluation of the market participants in this respect. The BCL is authorised to take and sell participations as well as, in exceptional circumstances, to make short-term lending to counterparties with appropriate guarantees. In addition, establishing the single supervisory mechanism, the macro-prudential authority, the single resolution mechanism, and the deposit guarantee scheme have resulted and continue to entail new missions and responsibilities for the BCL.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of the financial statements are set out below:

2.1 Layout of the financial statements

The financial statements of the BCL have been prepared and drawn up in accordance with the generally accepted accounting principles and those defined by the ESCB.

2.2 Accounting principles

The following accounting principles have been applied:

- economic reality and transparency;
- prudence;
- recognition of post-balance sheet events;
- continuity of methods and comparability;
- relative significance;
- going concern concept;
- recognition of charges and income in the accounting period they relate to.

2.3 Basis of preparation

The financial statements have been prepared under the historical cost convention, modified to include the valuation at market prices of securities (other than those classified as held-to-maturity and those held for monetary policy purposes), gold and of all other on-balance-sheet and off-balance-sheet assets and liabilities denominated in foreign currency.

Transactions in financial assets and liabilities are reflected in the accounts of the BCL on the basis of their settlement date.

2.4 Gold and foreign currency assets and liabilities

Assets and liabilities denominated in foreign currencies (including gold) are converted into euro at the exchange rate prevailing on the balance sheet closing date. Income and expenses are converted at the exchange rate prevailing on the dates of the transactions.

Assets and liabilities denominated in foreign currencies are revalued on a currency by currency basis including on-balance sheet and off-balance sheet items.

Revaluation to the market price for assets and liabilities denominated in foreign currency is treated separately from the exchange rate revaluation.

Gold is revalued on the basis of the euro price per fine ounce as derived from the quotation in US dollars established at the time of the London fixing on the last working day of the year.

2.5 Rules applicable to the portfolios held by the BCL

Securities currently held for monetary policy purposes are accounted for at amortised cost (subject to impairment).

Marketable securities other than securities held for monetary policy purposes and those classified as held-to-maturity are valued at the market price prevailing on the balance sheet date. Marketable securities classified as held-to-maturity are valued at amortised cost (purchase or transfer price adjusted by premiums and discounts) subject to impairment.

The revaluation of securities takes place item-by-item on the basis of their ISIN code.

Off-balance-sheet instruments are revalued on an item-by-item basis. Daily changes in the variation margin of open interest rate futures contracts are recorded in the Profit and Loss Account.

The Agreement on Net Financial Assets (ANFA) is an agreement between the National Central Banks (NCBs) of the euro area and the European Central Bank (ECB), which together form the Eurosystem. The objective of this agreement is for the Governing Council of the ECB to ensure a full control of the consolidated balance sheet of the Eurosystem. The agreement sets rules and limits for holdings of financial assets which are related to national tasks of the NCBs other than the monetary policy[1]. As part of this agreement, the principle of a dynamic exemption is foreseen in relation to the maximum amount of net financial assets (NFA). This dynamic exemption, which applies to the BCL, adjusts the historical waiver (ensuring that the NCBs do not have to reduce their NFA below a level which is linked to their historical starting position) over time in proportion to the growth or decline of Eurosystem maximum NFA.

2.6 Recognition of gains and losses

Income and expenses are recognised in the period in which they are earned or incurred.

Realised gains and losses on foreign exchange transactions, securities and financial instruments linked to interest rates and market prices are taken to the profit and loss account.

At the end of the year, unrealised revaluation gains on foreign currencies, securities and financial instruments are not considered in the profit and loss account, but transferred to a revaluation account on the liabilities side of the balance sheet.

Unrealised losses are recognised in the profit and loss account when they exceed previous revaluation gains registered in the corresponding revaluation account. They may not be reversed against new unrealised gains in subsequent years. Unrealised losses regarding a specific security, financial instrument, currency or in gold holdings are not netted with unrealised gains in other securities, financial instruments, currencies or gold holdings.

In order to calculate the acquisition cost of securities or currencies that are sold, the average cost method is used on a daily basis. If any negative revaluation differences are taken to the profit and loss account, the average cost of the asset in question is adjusted downwards to the level of the current exchange rate or market price thereof.

For fixed-income securities, the premiums or discounts arising from the difference between the average acquisition cost and the redemption price are calculated and presented on a prorata basis as part of the interest positions and amortised over the remaining life of the securities.

2.7 Presentation of interest income and expense

With a view to harmonizing at Eurosystem level, the interest income and expense arising from monetary policy operations are presented on a net basis on a balance sheet (sub-) item level under either "Interest income" or "Interest expenses", depending on whether the net amount is positive or negative.

2.8 Events after the reporting period

Assets and liabilities are adjusted to take account of events occurring between the balance sheet date and the date on which the BCL's Council approves the annual accounts if such events have a material effect on the assets and liabilities on the balance sheet date.

2.9 Banknotes in circulation

The ECB and the euro area NCBs, which together comprise the Eurosystem, issue euro banknotes. The total value of euro banknotes in circulation is allocated to the Eurosystem central banks on the last working day of each month in accordance with the banknote allocation key.

1 The annual average Net Financial Assets of the NCBs is published on the website of the ECB at the following address: https://www.ecb.europa.eu/explainers/tell-me-more/shared/data/annual_average_nfa.en.xlsx. The most recent data are published during the semester starting the next financial year.

The ECB has been allocated a share of 8% of the total value of euro banknotes in circulation, whereas the remaining 92% has been allocated to NCBs according to their weightings in the capital key of the ECB. The share of banknotes allocated to each NCB is disclosed in the balance sheet under liability item "Banknotes in circulation".

The difference between the value of the euro banknotes allocated to each NCB in accordance with the banknote allocation key and the value of the euro banknotes that it actually puts into circulation also gives rise to intra-Eurosystem balances. These claims or liabilities are disclosed under the sub-item "Intra-Eurosystem: Net claims/liabilities related to the allocation of euro banknotes within the Eurosystem".

The interest income and expense on these balances is cleared through the accounts of the ECB and is disclosed under "Net interest income" in the profit and loss account.

2.10 Intra-Eurosystem claims and liabilities

Intra-Eurosystem balances result primarily from cross-border payments in the EU that are settled in central bank money in euro. They are settled in TARGET2 (Trans-European Automated Real-time Gross settlement Express Transfer system) and give rise to bilateral balances in the TARGET2 accounts of EU central banks. These bilateral balances are netted out and then assigned to the ECB on a daily basis, leaving each NCB with a single net bilateral position vis-à-vis the ECB only. Intra-Eurosystem balances of the BCL vis-à-vis the ECB arising from TARGET2, as well as other intra-Eurosystem balances denominated in euro are presented on the balance sheet of the BCL as a single net asset position and disclosed under "Other claims within the Eurosystem (net)".

There are other claims and liabilities of the BCL vis-à-vis the Eurosystem due to its participation in the capital of the ECB (see the sub-item "Participating interest in the ECB"), the transfer of a part of foreign reserves (see the sub-item "Claims equivalent to the transfer of foreign reserves"), the interim profit distributions and accrued liabilities from the ECB resulting from the distribution of the monetary income results and the allocation of euro banknotes between the NCBs and the ECB.

Intra-Eurosystem balances arising from the allocation of euro banknotes within the Eurosystem are included as a single net position under "Net liabilities related to the allocation of euro banknotes within the Eurosystem".

Intra-Eurosystem claims and liabilities arising from TARGET2 balances and counterparties accounts are shown as a single net position on the balance sheet of the BCL.

2.11 Treatment of tangible and intangible assets

The tangible and intangible assets, except for land and works of art, are stated at their acquisition cost less depreciation. Depreciation is calculated on a straight-line basis over the estimated useful life of the fixed asset:

	Years
Buildings	25
Renovation of buildings	10
Furniture and equipment	3-5
Computer hardware and software	4

2.12 Pension fund

Since 1 January 1999, after the entry into force of the Founding Law of 23 December 1998, as modified, the legal pension claims (1st pillar) of the BCL's staff are fully borne by the BCL. The pension fund was set up in 2000.

The actuarial method determines the pension fund's liability related to old age, disability or survival for each member of staff. The actuarial model is based, among other things, on each member of staff's personal and past and foreseeable career data, on the forecast of the cost and standard of living as well as on an average rate of return generated by the fund's assets.

The BCL's liabilities related to pensions are shown in the account "Provisions for pensions". The provision increases as a result of regular transfers from the wage share and from the notional employer's share and decrease by pension payments to retirees. At the year end, the provision is adjusted in the light of the new actuarial calculation. In addition, if necessary, periodic transfers from the account "Booking reserve of the pension fund", equivalent to the gains generated by the fund's assets, to adjust the account "Provision for pensions".

In cases where regular transfers and the results of the pension fund would be insufficient to cover the BCL's pension liabilities, the difference between the existing provision and the accrued liabilities valued by the actuary is covered in the same trend by an additional contribution from the BCL. The BCL applies the method of projected unit credit in line with international standards.

In accordance with the prudence principle, the management body of the BCL has decided to gradually follow the measurement method from IAS 19 standard.

2.13 Provision for banking risks

In accordance with the prudence principle, the BCL's provision policy intends to cover specific and general risks resulting from the Bank's activities.

NOTE 3 - GOLD AND GOLD RECEIVABLES

As at 31 December 2017, the BCL holds 72 219.72 ounces of fine gold amounting to 78.1 million euro (72 256.82 ounces of fine gold amounting to 79.3 million euro on 31 December 2016).

On the balance sheet date, gold is valued on the basis of the euro price per fine ounce derived from the quotation in US dollars established at the London fixing on 29 December 2017.

NOTE 4 - CLAIMS ON NON-EURO AREA RESIDENTS DENOMINATED IN FOREIGN CURRENCY

	2017 EUR	2016 EUR
Receivables from the IMF	509 900 086	662 048 036
Balances with banks, security investments, external loans and other external assets	144 232 972	181 247 617
	654 133 058	**843 295 653**

Under this item are recorded the BCL's foreign exchange reserve holdings with counterparties situated outside the euro area (including international and supranational institutions and non-Eurosystem central banks).

4.1 Receivables from the IMF

This sub-item contains receivables from the International Monetary Fund (IMF) made up of reserve tranche position, SDR holdings and new arrangements to borrow. SDR are reserve assets created by the IMF and allocated by it to its members. A member's SDR holdings initially amount to the SDR allocated. Afterwards, SDR holdings are subject to fluctuations as a result of encashments and transactions. The reserve tranche position corresponds to the net amount of the quota and the IMF's currency holding and takes into account the re-evaluation of the general account. The new arrangements to borrow are credit agreements between the IMF and the Government of Luxembourg.

4.2 Balances with banks, security investments, external loans and other external assets

This sub-item contains balances held on accounts with banks outside the euro area as well as securities, loans and other foreign currency assets issued by non-residents of the euro area. It includes in particular the US dollar securities portfolio which could be used, if needed, for monetary policy operations.

This portfolio, which amounts to 130 million euro as at 31 December 2017 (148 million euro on 31 December 2016), mainly consists of government bonds and bonds issued by international and supranational institutions denominated in US dollars. Securities are valued at market prices. As at 31 December 2017, their value at market prices included a negative net revaluation adjustment amounting to 0.8 million euro (negative net revaluation adjustment amounting to 0.7 million euro on 31 December 2016).

Balances with banks amounted to 14.6 million euro as at 31 December 2017 (33.5 million euro on 31 December 2016).

NOTE 5 - CLAIMS ON EURO AREA RESIDENTS DENOMINATED IN FOREIGN CURRENCY

This item contains balances in foreign currency held by the BCL on accounts with euro area counterparties which amounts to 1 416 million euro as at 31 December 2017 (1 337 million euro on 31 December 2016).

NOTE 6 - CLAIMS ON NON-EURO AREA RESIDENTS DENOMINATED IN EURO

	2017 EUR	2016 EUR
Balances with banks	409 951	886 691
Available-for-sale securities portfolio	493 395 401	805 060 900
	493 805 352	**805 947 591**

This item contains balances held on accounts with banks outside the euro area as well as securities, deposits, loans and other euro-denominated assets issued by non-residents of the euro area.

The available-for-sale securities portfolio contains government bonds and bonds issued by companies outside the euro area denominated in euro. Securities are valued at market value. As at 31 December 2017, the market value of the latter comprised a negative net revaluation adjustment amounting to 5.3 million euro including the premium and discount amortisation (negative net revaluation adjustment amounting to 4.9 million euro on 31 December 2016).

NOTE 7 - LENDING TO EURO AREA CREDIT INSTITUTIONS RELATED TO MONETARY POLICY OPERATIONS DENOMINATED IN EURO

This balance sheet item represents the liquidity-providing transactions executed by the BCL with Luxembourg credit institutions.

The item is divided into various sub-items depending on the type of instrument used to provide liquidity to the financial sector:

	2017 EUR	2016 EUR
Main refinancing operations	-	800 000 000
Longer-term refinancing operations	5 632 440 000	4 107 440 000
Fine-tuning reverse operations	-	-
Structural reverse operations	-	-
Marginal lending facility	-	27
Credits related to margin calls	-	-
	5 632 440 000	**4 907 440 027**

As at 31 December 2017, the total Eurosystem holding of monetary policy assets amounts to 764 310 million euro of which the BCL holds 5 632 million euro.

In accordance with Article 32.4 of the Statute of the ESCB, any risks from monetary policy operations, if they were to materialise, may be shared in full by the Eurosystem NCBs, in proportion to the prevailing ECB capital key shares.

Losses can only materialise if both the counterparty fails and the recovery of funds received from the resolution of the collateral provided by the counterparty is not sufficient.

It should be noted that for specific collateral which can be accepted by NCBs at their own discretion, risk sharing has been excluded by the Governing Council of the ECB.

7.1 <u>Main refinancing operations</u>

Main refinancing operations are executed through liquidity providing reverse transactions with a weekly frequency and a maturity of normally one week, on the basis of standard tenders.

Since October 2008, these operations were conducted as fixed rate tender procedures. These operations play a key role in achieving the aims of steering interest rate, managing market liquidity and signalling the monetary policy stance.

7.2 <u>Longer-term refinancing operations</u>

These operations aim to provide counterparties with additional longer-term refinancing. In 2017 operations were conducted with maturities equal to the reserve maintenance period and with maturities between 3 and 48 months. These operations were conducted at fixed rate with allotment of the total amount bid. Additionally, in 2016, the Governing Council introduced a new series of four targeted longer-term refinancing operations (TLTRO II). These operations have a four-year maturity, with a possibility of repayment after two years. The applicable interest rate for TLTRO II operations depends on the individual lending benchmark of the respective counterparty between the date of allotment and January 2018. The actual rate will be set in 2018 and will be between the MRO rate and the deposit facility rate at the time of the allotment. Given that the actual rate is only known in 2018 and a reliable estimate is not possible at this juncture, the deposit facility rate has been used for calculating the TLTRO II interest for 2017, as this is deemed a prudent approach.

7.3 Fine-tuning reverse operations

This sub-item includes open market operations carried out on a non-regular basis, intended primarily to meet unexpected fluctuations in market liquidity.

7.4 Structural reverse operations

These are open market operations carried out with the primary intention of bringing about a lasting change in the structural liquidity position of the financial sector vis-à-vis the Eurosystem.

7.5 Marginal lending facility

This sub-item includes a standing facility enabling counterparties to obtain overnight credit from the BCL at a pre-specified interest rate against eligible collateral.

7.6 Credits related to margin calls

This sub-item includes additional credit extended to credit institutions and resulting from the increase in the value of the securities pledged as collateral for other credits extended to these same institutions.

NOTE 8 - OTHER CLAIMS ON EURO AREA CREDIT INSTITUTIONS DENOMINATED IN EURO

This item includes the BCL's current accounts and fixed-term deposits not related to monetary policy operation with credit institutions inside the euro area.

NOTE 9 - SECURITIES OF EURO AREA RESIDENTS DENOMINATED IN EURO

	2017 EUR	2016 EUR
Securities held for monetary policy purposes	5 721 670 418	3 543 927 349
Other securities	586 098 895	1 109 735 559
- available-for-sale securities portfolio	*461 393 735*	*915 563 105*
- held-to-maturity securities portfolio	*124 705 160*	*194 172 454*
	6 307 769 313	**4 653 662 908**

9.1 Securities held for monetary policy purposes

This item contains securities acquired by the BCL within the scope of the three purchase programme for covered bonds, the securities markets programme (SMP) and the public sector purchase programme (PSPP).

Purchases under the first covered bond purchase programme were completed on 30 June 2010, while the second covered bond purchase programme ended on 31 October 2012. The Securities Markets Programme was terminated on 6 September 2012.

In 2017 the Eurosystem continued its securities purchases under the expanded asset purchase programme (APP), which includes the third covered bond purchase programme (CBPP3), the asset-backed security purchase programme (ABSPP), the PSPP and the corporate sector purchase programme (CSPP). The monthly pace of combined net APP purchases by the NCBs and the ECB was 80 billion euro on average until March 2017 and 60 billion euro from April 2017 until the end of the year 2017. Based on the Governing Council decision in October 2017, these purchases are intended to continue at a monthly pace of 30 billion euro from January 2018 to September 2018 or beyond, if necessary, and, in any case, until the Governing Council sees a sustained adjustment in the path of inflation that is consistent with its inflation aim.

The net purchases will be made alongside reinvestments of the principal payments from maturing securities purchased under the APP.

The securities purchased under all of these programmes are valued on an amortised cost basis subject to impairment.

The amortised cost of the securities held by BCL, as well as their market value (which is provided for comparison purposes only), are as follows:

Securities held for monetary policy purposes	2017 EUR		2016 EUR	
	Amortised cost	Market value	Amortised cost	Market value
Second covered bond purchase programme	-	-	14 497 404	14 625 380
Third covered bond purchase programme	1 117 063 949	1 128 287 383	554 453 057	562 358 581
Securities markets programme	120 028 853	131 851 835	153 412 053	169 896 930
Public sector purchase programme	4 484 577 616	4 479 389 911	2 821 564 835	2 826 953 659
	5 721 670 418	**5 739 529 129**	**3 543 927 349**	**3 573 834 550**

Market values are indicative and were derived on the basis of market quotes. When market quotes were not available, the amortised cost was used for the evaluation of the securities portfolio.

The Governing Council assesses on a regular basis the financial risks associated with the securities held under these programmes. Annual impairment tests are conducted on the basis of the estimated recoverable amounts as at the year-end and are approved by the Governing Council.

The total Eurosystem NCB's holding of securities held in the securities markets programme, in the third covered bond purchase programme, in the corporate sector purchase programme and securities issued by international or supranational institutions held in the public sector purchase programme amounts to 639.0 billion euro as at 31 December 2017, of which the BCL holds 3 960.8 million euro.

In the context of the impairment test conducted as at the end of 2017 on securities purchased under the third covered bond purchase programme, the Governing Council identified one impairment indicator for one issuer which was subject to restructuring measures due to financial difficulties. Governing Council considered that the identified impairment indicator had not affected the estimated future cash flows. No impairment losses were therefore recorded at the year-end on the BCL's covered bonds holdings under the third covered bond purchase programme.

In accordance with Article 32.4 of the Statute, losses from securities holdings purchased under the CSPP programme are shared in full by the Eurosystem NCBs, in proportion to their prevailing ECB capital key shares. In the context of the impairment test conducted as at the end of 2017 on securities purchased under the CSPP programme, the Governing Council identified one impairment indicator relating to the holdings of a security, which was triggered in the course of 2017. As a result of the impairment test conducted on the above-mentioned security, the Governing Council has deemed it appropriate to establish a buffer against credit risks in monetary policy operations during 2017 (see note 20, "Provisions"). The concerned security was sold in January 2018.

9.2 Other securities

The securities recorded under this item include:

– the available-for-sale securities portfolio in euro issued by residents of the euro area amount to 461.4 million euro as at 31 December 2017 (915.6 million euro on 31 December 2016). This portfolio contains government bonds in euro issued by Member States of the euro area and bonds issued by companies of the euro area. Securities are valued at market value. As at 31 December 2017, the market value of the latter comprised a negative net revaluation adjustment amounting to 0.8 million euro including premium and discount amortisation (positive net revaluation adjustment amounting to 6.5 million euro on 31 December 2016). In this portfolio, the BCL does not hold any security issued by the State of the Grand Duchy of Luxembourg;

- the held-to-maturity securities portfolio which securities are intended to be held until maturity. This portfolio is valued at amortised cost, purchase or transfer price adjusted by premiums, discounts and impairment. As at 31 December 2017, these securities amount to 124.7 million euro (194.2 million euro on 31 December 2016). In this portfolio, the BCL does not hold any security issued by the State of the Grand Duchy of Luxembourg.

NOTE 10 - INTRA-EUROSYSTEM CLAIMS

10.1 Participating interest in ECB

Pursuant to Article 28 of the ESCB Statute, the ESCB national central banks are the sole subscribers to the capital of the ECB. Subscriptions depend on shares which are fixed in accordance with Article 29.3 of the ESCB Statute and are subject to adjustment every five years.

The NCBs' capital key shares are as follows (in percentage):

Country	Capital key in ESCB	Eurosystem key
	from 01/01/2014	from 01/01/2015
Belgium	2.4778	3.52003
Germany	17.9973	25.56743
Estonia	0.1928	0.27390
Ireland	1.1607	1.64892
Greece	2.0332	2.88842
Spain	8.8409	12.55961
France	14.1792	20.14334
Italy	12.3108	17.48904
Cyprus	0.1513	0.21494
Latvia	0.2821	0.40076
Lithuania	0.4132	0.58700
Luxembourg	0.2030	0.28839
Malta	0.0648	0.09206
Netherlands	4.0035	5.68748
Austria	1.9631	2.78883
Portugal	1.7434	2.47672
Slovenia	0.3455	0.49083
Slovak Republic	0.7725	1.09743
Finland	1.2564	1.78487
Bulgaria	0.8590	-
Czech Republic	1.6075	-
Denmark	1.4873	-
Croatia	0.6023	-
Hungary	1.3798	-
Poland	5.1230	-
Romania	2.6024	-
Sweden	2.2729	-
United Kingdom	13.6743	-
Total	**100.0000**	**100.00000**

The capital shares of the NCBs in the ECB are shown in the following table (in euro):

	Subscribed capital since 1 January 2015	Paid-up capital since 1 January 2015
Banque Nationale de Belgique	268 222 025	268 222 025
Deutsche Bundesbank	1 948 208 997	1 948 208 997
Eesti Pank	20 870 614	20 870 614
Central Bank of Ireland	125 645 857	125 645 857
Banque de Grèce	220 094 044	220 094 044
Banco de España	957 028 050	957 028 050
Banque de France	1 534 899 402	1 534 899 402
Banca d'Italia	1 332 644 970	1 332 644 970
Central Bank of Cyprus	16 378 236	16 378 236
Latvijas Banka	30 537 345	30 537 345
Lietuvos bankas	44 728 929	44 728 929
Banque centrale du Luxembourg	21 974 764	21 974 764
Central Bank of Malta	7 014 605	7 014 605
De Nederlandsche Bank	433 379 158	433 379 158
Oesterreichische Nationalbank	212 505 714	212 505 714
Banco de Portugal	188 723 173	188 723 173
Banka Slovenije	37 400 399	37 400 399
Národná banka Slovenska	83 623 180	83 623 180
Suomen Pankki – Banque de Finlande	136 005 389	136 005 389
Subtotal for euro area NCB	***7 619 884 851***	***7 619 884 851***
Българска народна банка (Bulgarian National Bank)	92 986 811	3 487 005
Česká národní banka	174 011 989	6 525 450
Danmarks Nationalbank	161 000 330	6 037 512
Hrvatska narodna banka	65 199 018	2 444 963
Magyar Nemzeti Bank	149 363 448	5 601 129
Narodowy Bank Polski	554 565 112	20 796 192
Banca Națională a României	281 709 984	10 564 124
Sveriges Riksbank	246 041 586	9 226 559
Bank of England	1 480 243 942	55 509 148
Subtotal for non-euro area NCB	***3 205 122 218***	***120 192 083***
Total	**10 825 007 070**	**7 740 076 935**

Totals may not add up due to rounding.

The share that the BCL held in the accumulated net profits of the ECB reflects the repayment of 14.4 million euro of ECB reserves.

10.2 Claims equivalent to the transfer of foreign reserves to the ECB

This sub-item represents the euro-denominated claims on the ECB with respect to the transfer of part of the BCL's foreign reserves. The claims are denominated in euro at a value fixed at the time of their transfer.

They are remunerated at the latest available marginal interest rate used by the Eurosystem in its tender for main refinancing operations, adjusted to reflect a zero return on the gold component.

As at 31 December 2017, the claim of the BCL amounts to 117 640 617 euro (117 640 617 euro on 31 December 2016).

10.3 Other claims within the Eurosystem

This sub-item represents the BCL's net claims towards the Eurosystem, mostly from transactions resulting from cross-border payments initiated for monetary or financial operations, made via the TARGET2 system, between the BCL and the other NCBs as well as the ECB. This claim amounts to 191.8 billion euro as at 31 December 2017 (187.2 billion euro on 31 December 2016). This increase results from the growth of the current accounts and of the deposit facilities related to the provision of liquidities by the Eurosystem.

The net position vis-à-vis the ECB bears interest at the marginal interest rate applying to the main refinancing operations.

NOTE 11 - OTHER ASSETS

11.1 Tangible and intangible assets

Tangible and intangible assets are as follows:

	Lands and Buildings EUR	Furniture and equipment EUR	Software EUR	Other EUR	Total EUR
Cost as at 1 January 2017	116 447 231	18 334 614	9 982 971	2 266 750	147 031 566
Disposals/Transfers	-	-	1 970 635	(1 975 035)	(4 400)
Acquisitions	464 569	472 834	231 906	2 188 382	3 357 691
Cost as at 31 December 2017	**116 911 800**	**18 807 448**	**12 185 512**	**2 480 097**	**150 384 857**
Accumulated depreciation as at 1 January 2017	62 204 737	16 051 419	8 904 553	-	87 160 709
Disposals	-	-	-	-	-
Depreciation	4 250 722	1 029 395	695 694	-	5 975 811
Accumulated depreciation as at 31 December 2017	**66 455 459**	**17 080 814**	**9 600 247**	-	**93 136 520**
Net book value as at 31 December 2017	**50 456 341**	**1 726 634**	**2 585 265**	**2 480 097**	**57 248 337**

The sub-item "Lands and Buildings" comprises:

- the acquisition cost of the two premises located on 2, Boulevard Royal;
- the renovations made to the main building ("Siège Royal");
- the costs incurred in relation to the reconstruction and transformation of the "Pierre Werner" building;
- the costs incurred in relation to the reconstruction and transformation of the "Monterey" building;
- the acquisition cost of the building "7, Boulevard Royal";
- the renovations made to the building "7, Boulevard Royal".

11.2 Other financial assets

The components of this item are as follows:

	2017 EUR	2016 EUR
Other participating interests	85 251 623	91 542 852
Pension fund	366 428 541	349 903 326
	451 680 164	**441 446 178**

The other participating interests comprise the BCL's investments held in 2017 in SWIFT, LuxCSD SA., Islamic Liquidity Management Corporation and Bank for International Settlements.

The assets of the pension fund are recorded in the accounts under "Pension fund". The balance of this account corresponds to the net asset value of the fund as calculated by the depositary bank as at 29 December 2017.

11.3 Accruals and prepaid expenses

Most of this item consists of the accrued interests on monetary policy operations, securities and receivables from the IMF. Also included under this item are the commission receivables and the prepaid expenses, including salaries paid for January 2018.

11.4 Sundry

	2017 EUR	2016 EUR
Others	10 007 409	2 171 683
	10 007 409	**2 171 683**

As at 31 December 2017, this sub-item mainly comprises the counterpart of the unrealised loss on SDR recorded in the financial statements of the BCL amounting to 8.0 million euro, which is guaranteed by the Government according to the agreement signed in May 1999 establishing the financial relationship between the Government of Luxembourg and the BCL.

As at 31 December 2016, the BCL noted a non-realised gain on SDR (see Note 19 "Other liabilities").

NOTE 12 - BANKNOTES IN CIRCULATION

This item consists of the BCL's share of the total euro banknotes in circulation.

During 2017, the total value of banknotes in circulation within the Eurosystem increased by 4%. According to the allocation key, the BCL had euro banknotes in circulation worth 3 108.3 million euro at the end of 2017 compared with 2 990.1 million euro at the end of 2016.

The value of the euro banknotes actually issued by the BCL in 2017 increased by 1% and worth 97.7 billion euro as at 31 December 2017 (96.6 billion euro as at 31 December 2016). As this was more than the allocated amount, the difference of 94.6 billion euro (93.6 billion euro as at 31 December 2016) is shown under liability sub-item "Net liabilities related to the allocation of euro banknotes within the Eurosystem".

NOTE 13 - LIABILITIES TO EURO AREA CREDIT INSTITUTIONS RELATED TO MONETARY POLICY OPERATIONS DENOMINATED IN EURO

	2017 EUR	2016 EUR
Current accounts (including the minimum reserves)	60 489 399 078	60 290 467 129
Deposit facility	42 385 900 000	37 142 600 000
Fixed-term deposits	-	-
Fine-tuning reverse operations	-	-
Deposits related to margin calls	-	-
	102 875 299 078	**97 433 067 129**

13.1 Current accounts (covering the minimum reserve system)

Current accounts contain the credit balances on the transaction accounts of credit institutions that are required to hold minimum reserves. Banks' minimum reserve balances have been remunerated since January 1, 1999 at the latest available marginal interest rate used by the Eurosystem in its tenders for main refinancing operations. Since June 2014 the reserve holdings exceeding the required minimum reserves are remunerated at zero per cent or the deposit facility rate, whichever is lower.

13.2 Deposit facility

This sub-item comprises the standing facility allowing credit institutions to make overnight deposits with the BCL at a pre-specified interest rate.

13.3 Fixed-term deposits

This sub-item comprises deposits made at the BCL for the purpose of absorbing market liquidity in connection with fine-tuning operations in the Eurosystem.

13.4 Fine-tuning reverse operations

This sub-item comprises other monetary policy operations aimed at tightening liquidity.

13.5 Deposits related to margin calls

This sub-item comprises deposits made by credit institutions to compensate for the decrease in the value of securities pledged as collateral, below an established trigger point, for other credits granted to these same institutions.

NOTE 14 - LIABILITIES TO OTHER EURO AREA RESIDENTS DENOMINATED IN EURO

14.1 Liabilities to general government

This item records the amounts as follows:

	2017 EUR	2016 EUR
Current accounts	1	-
Account related to euro coins issued by the Treasury	289 841 435	280 991 031
Specific account of the State	382 174 064	422 174 064
Fixed-term deposit	137 359 761	140 000 000
	809 375 261	**843 165 095**

In accordance with the amendment of 10 April 2003 to the agreement between the Government of Luxembourg and the BCL establishing their financial relationship, the "Account related to euro coins issued by the Treasury" corresponds to the amount of coins issued by the BCL in the name and for the account of the Treasury.

The specific account was opened for the State of Luxembourg in 2011 in order to realise operations with the IMF.

The fixed-term deposit relates to the above-mentioned agreement.

14.2 Other liabilities

	2017 EUR	2016 EUR
Other liabilities	1 993 692 294	1 915 203 865
	1 993 692 294	**1 915 203 865**

As at 31 December 2017, this item included mainly a current account held by an European institution.

NOTE 15 - LIABILITIES TO NON-EURO AREA RESIDENTS DENOMINATED IN EURO

This item includes current accounts and deposits held by central banks, international and supranational institutions and other account holders outside the euro area.

NOTE 16 - LIABILITIES TO NON-EURO AREA RESIDENTS DENOMINATED IN FOREIGN CURRENCY

This item includes current accounts and deposits in foreign currency held by central banks outside the euro area.

NOTE 17 - COUNTERPART OF SPECIAL DRAWING RIGHTS ALLOCATED BY THE IMF

The amount shown under this item represents the countervalue of SDR, converted to euro at the same rate as applied to the SDR assets, which should be returned to the IMF in the event of the SDR being cancelled, the SDR Department established by the IMF being closed or if Luxembourg decides to withdraw from it. This liability, of unlimited duration, amounts to SDR 246.6 million, or 292.9 million euro as at 31 December 2017 (SDR 246.6 million, or 314.3 million euro on 31 December 2016).

NOTE 18 - INTRA-EUROSYSTEM LIABILITIES

18.1 Net liabilities related to the allocation of euro banknotes within the Eurosystem

This item consists of the liabilities of the BCL vis-à-vis the Eurosystem relating to the allocation of euro banknotes within the Eurosystem as explained in Note 12. The net position bears interest at the marginal interest rate applying to the main refinancing operations.

NOTE 19 - OTHER LIABILITIES

This item comprises mainly the accrued interest, miscellaneous expenses payable, including suppliers, and the Luxembourg francs banknotes not yet returned.

As at 31 December 2016, the item "Other liabilities" also comprised the counterpart of the gains on SDR for 10.6 million euro. In 2017, the BCL noted a loss on SDR as explained in item "Other assets" (see Note 11.4).

The Luxembourg franc banknotes still circulating as at 31 December 2017 amount to 5.0 million euro (5.0 million euro on 31 December 2016).

NOTE 20 - PROVISIONS

Provisions are as follows:

	2017 EUR	2016 EUR
Provision for banking risks	950 691 664	933 683 166
Provision for pensions	387 315 357	366 070 000
Other provisions	187 000	169 000
	1 338 194 021	**1 299 922 166**

20.1 Provision for banking risks

Provision for banking risks includes the following items:

Provisions for specific banking risks	2017 EUR	2016 EUR
Provision covering credit and market risk	580 594 982	542 444 999
Buffer against counterparty risks in Eurosystem	198 614	-
Provision covering operational risk	14 590 000	18 560 000
Provision covering liquidity risk	18 392 699	17 012 798
	613 776 295	**578 017 797**
Provisions for general banking risks	**2017 EUR**	**2016 EUR**
Provision for liabilities resulting from monetary agreements	32 341 954	32 341 954
Other provision for general banking risks	304 573 415	323 323 415
	336 915 369	**355 665 369**
	950 691 664	**933 683 166**

20.1.1 Provision covering credit and market risk

The provision of 580.6 million euro as at 31 December 2017 (542.4 million euro on 31 December 2016) corresponds to:

- 8.18% (8.18% on 31 December 2016) of the BCL's own securities portfolio existing as at 31 December 2017 and participations other than the participating interest in the capital of the ECB;
- 8.18% (8.18% on 31 December 2016) of the amount lent by the Eurosystem (main and longer-term refinancing operations) as at year-end for monetary policy purposes multiplied by the BCL's capital key in Eurosystem including securities held in the framework of the Securities Markets Programme, the third covered bond purchase programme and the corporate sector purchase programme, and the securities issued by international or supranational institutions held in the public sector purchase programme (excluding securities held by the ECB).

According to the BCL's guidelines of the Bank's Council, the objective is to target a rate of 12% on all items above. In order to achieve this objective in the light of non-conventional measures, this provision should be progressively increased by an additional amount of more than 1 100 million euro (2016: 1 100 million euro) over the next years in order to cover the potential liabilities. It is worth noting that the current financial capacity of the BCL is insufficient to generate the required level of income.

Yet this situation goes against the ECB recommendations on 7 September 2012 in relation to the capital increase of the BCL (CON/2012/69) in which it is noted that: *"The principle of financial independence requires a national central bank (NCB) within the European System of Central Banks (ESCB) to have sufficient means not only to perform its ESCB or Eurosystem-related tasks, but also its national tasks, e.g. financing its administration and own operations. [...] Financial independence primarily implies that an NCB should always be sufficiently capitalised. [...] In particular, the ECB is of the view that the higher the level of capital, reserves and provisions against financial risks is, the higher the safeguards against future losses are."*

20.1.2 Buffer against counterparty risks in Eurosystem

As a result of the impairment test conducted on its CSPP portfolio, the Governing Council has deemed it appropriate to establish a provision totalling 68 870 710 euro against losses in monetary policy operations, in relation to a security held by an NCB of the Eurosystem. The size of this provision has been calculated taking into account the information regarding the security sale in January 2018. This is in line with the framework for accounting and financial reporting in the ESCB for post balance sheet events.

In accordance with Article 32.4 of the ESCB Statute, this buffer will be funded by all the NCB of participating Member States in proportion to their subscribed capital key shares in the ECB prevailing in 2017. As a result, for the BCL, a provision amounting to 198 614 euro equivalent to 0.28839% of the total provision was created.

20.1.3 Provision covering operational risk

This provision is intended to cover the risk of losses resulting from the inadequacy or fault attributable to procedures, to the human factor or to the BCL's systems or to external causes. Because of a lack of relevant statistics on the dimension of risk, the transfer to the provision is based on the Basic Indicator Approach described in the consultative working paper of the Basel Committee as being 15% of the average for the last three years of the net banking product (including payments allocated on monetary income).

In 2017, the average has been based on previous years in accordance with these rules.

20.1.4 Provision for liabilities resulting from monetary agreements

The provision created in order to face any future monetary liabilities did not change in 2017.

20.1.5 Other provision for general banking risks

This provision is intended to cover non-specific risks of losses resulting from central bank's activities. Due to the uncertainties of the financial markets, those risks can not be quantified in advance.

The BCL reversed a part of its provision for general banking risks in 2017 for an amount of 18.75 million euro.

20.2 Provision for pensions

Provision for pensions include the following items:

	2017 EUR	2016 EUR
Provision for pensions	387 315 357	366 070 000
	387 315 357	**366 070 000**

In accordance with its Organic Law, the statutory pensions (first pillar) of its staff members are fully borne by the BCL.

The financing of pension obligations is provided on the one hand through deductions from wages and salaries in accordance with the rules governing the pension regime at the BCL and the other hand by payments made by the BCL.

The pension liabilities of the employer vis-à-vis all its staff members amounted to 387.3 million euro at 31 December 2017 compared with 366.1 million euro at 31 December 2016.

The demographic, economic and financial assumptions applied as part of the assessment of pension liabilities at 31 December 2017 are as follows:

Discount rate	3.45%
Wage growth rate (incl. index)	3.30%
Expected return on plan assets	3.75%
Pension growth rate (incl. index)	2.35%
Mortality table	German DAV 2004 tables
Disability rate	0.50%
Staff turnover	0.00%

Pension liabilities have been assessed based on the principles of the IAS 19 accounting standard. This standard requires both the use of actuarial method of projected unit credit and the use of a discount rate corresponding to the Eurozone "corporate" bond rate with an AA rating and a duration - at value date - reflecting those of the liabilities. For the fiscal year 2017, this rate was estimated at 2.10%.

The full adoption of the measurement features from IAS 19 standard for the fiscal year 2017 would have resulted in pension fund liabilities of a total of 567.8 million euro. As a consequence, this would have amounted in a total 180.5 million euro to make up for in 2017.

It should be noted that the adoption of this method is not mandatory for the BCL. However, in order to best reflect the economic and financial reality and to be able to meet the requirement of its Organic Law to bear all the expenses for pensions of its staff members, the BCL has decided to progressively increase its pension provisions in line with the application of the measurement features from IAS 19, thus smoothing the major burden over several years.

The difference of 21.2 million euro in pension liabilities between 387.3 million euro as at 31 December 2017 and 366.1 million euro as at 31 December 2016 includes:

- salary and wage deductions (employees' share) accounting for 3.2 million euro;
- a transfer from the "Booking reserve of the pension fund" account (adjustment of the actuarial value of the pension fund assets) to the account "Provision for pensions" for 9.5 million euro;
- a contribution of 11.2 million euro borne by the BCL;
- pension payments for retired staff members of 1.6 million euro;
- a payment to the CNAP (Caisse Nationale d'Assurance Pension) for 1.1 million euro. This amount is due to the CNAP for retroactive insurance in the general regime for staff members who left the BCL.

NOTE 21 - REVALUATION ACCOUNTS

	2017 EUR	2016 EUR
Gold	62 561 936	63 762 854
Foreign Currency	32 110 825	61 003 115
Securities and other instruments	27 019 145	48 404 155
	121 691 906	**173 170 124**

This item includes positive revaluation differences related to the spread between the exchange rate as at year-end and the average exchange rate of the BCL's currency and gold positions, as well as positive revaluation differences related to the spread between the market value as at year-end and the amortised cost for securities positions.

NOTE 22 - CAPITAL AND RESERVES

22.1 Capital

The State of Luxembourg is the sole shareholder of the BCL's capital for an amount of 175 million euro (unchanged since June 2009).

22.2 Reserves

The reserves amount to 18.7 million euro (16.9 million euro on 31 December 2016). This amount was increased by 1.8 million euro following the allocation of profit for 2016 according to the decision of the BCL's Council in application of its Founding Law (Article 31).

NOTE 23 - SECURITIES RECEIVED AS COLLATERAL

This item includes the securities received as collateral from Luxembourg credit institutions to cover their liabilities related to refinancing operations, marginal lending facilities and intra-day credits.

This item also includes the securities received as collateral in Luxembourg and used as a guarantee by commercial banks incorporated in other member states according to the "Correspondent Central Banking Model" (CCBM). This agreement allows commercial banks to obtain funding from their country of residence's central bank by using the securities held in another Member State as a guarantee.

As at 31 December 2017, the market value of these securities amounts to 133.8 billion euro (122.4 billion euro on 31 December 2016).

NOTE 24 - FOREIGN RESERVE ASSETS MANAGED ON BEHALF OF THE ECB

This item includes the foreign currency reserves at market value managed by the BCL on behalf of the ECB.

NOTE 25 - FUTURES

These items contain, if any, the purchases and sales of interest rate futures presented at notional amount. These transactions were conducted in the context of the management of the BCL's own investments.

As at 31 December 2017, the BCL does not hold any outstanding futures.

NOTE 26 - NET INTEREST INCOME

This item includes interest income and expense.

Interest income and expense are as follows:

Composition of interest income	Amounts in foreign currency EUR	Amounts in euro EUR	Total EUR
	2017	2017	2017
IMF	2 956 456	-	2 956 456
Lending to euro area credit institutions related to monetary policy operations	-	20 598	20 598
Current accounts (including minimum reserves) and deposits related to monetary policy operations	-	369 227 860	369 227 860
Securities held for monetary policy purposes	-	12 240 681	12 240 681
Other securities	1 892 053	17 879 726	19 771 779
Other	15 464 782	7 137 931	22 602 713
Total	**20 313 291**	**406 506 796**	**426 820 087**

Composition of interest expense	Amounts in foreign currency EUR	Amounts in euro EUR	Total EUR
	2017	2017	2017
IMF	(1 576 555)	-	(1 576 555)
Lending to euro area credit institutions related to monetary policy operations	-	(18 941 257)	(18 941 257)
Other liabilities	(12 027 972)	(1 489 235)	(13 517 207)
Interest on swap operation	-	(1 397)	(1 397)
Total	**(13 604 527)**	**(20 431 889)**	**(34 036 416)**

Composition of interest income	Amounts in foreign currency EUR	Amounts in euro EUR	Total EUR
	2016	2016	2016
IMF	543 848	-	543 848
Lending to euro area credit institutions related to monetary policy operations	-	24 875	24 875
Current accounts (including minimum reserves) and deposits related to monetary policy operations	-	236 565 400	236 565 400
Intra-Eurosystem claims	-	15 547 993	15 547 993
Securities held for monetary policy purposes	-	10 942 915	10 942 915
Other securities	1 529 122	33 312 596	34 841 718
Other	12 152 157	2 933 879	15 086 036
Total	**14 225 127**	**299 327 658**	**313 552 785**

Composition of interest expense	Amounts in foreign currency EUR	Amounts in euro EUR	Total EUR
	2016	2016	2016
IMF	(271 004)	-	(271 004)
Lending to euro area credit institutions related to monetary policy operations	-	(6 595 853)	(6 595 853)
Liabilities related to the reallocation of euro banknotes in the Eurosystem	-	(9 654 765)	(9 654 765)
Other liabilities	(7 417 860)	(1 460 921)	(8 878 781)
Interest on swap operation	-	(299 874)	(299 874)
Total	**(7 688 864)**	**(18 011 413)**	**(25 700 277)**

NOTE 27 - REALISED GAINS / (LOSSES) ARISING FROM FINANCIAL OPERATIONS

This item includes the results from transactions in foreign currencies, from securities and from financial instruments linked to interest rates and market prices, i.e. realised gains minus realised losses on these transactions. In 2017, they amount to 28.0 million euro (17.7 million euro on 31 December 2016) and to 4.5 million euro (7.4 million euro on 31 December 2016) respectively, giving a net gain of 23.5 million euro (a net gain of 10.3 million euro on 31 December 2016).

NOTE 28 - WRITE-DOWNS ON FINANCIAL ASSETS AND FOREIGN CURRENCY POSITIONS

This item includes revaluation losses on securities for 0.7 million euro (revaluation losses on securities for 0.9 million euro in 2016).

NOTE 29 - TRANSFER (TO)/FROM PROVISIONS FOR RISKS

This item includes the transfers to and from provisions for banking risks and other provisions.

NOTE 30 - NET RESULT FROM FEES AND COMMISSIONS

Fees and commissions income and expense are as follows:

	Fees and commissions income EUR		Fees and commissions expense EUR	
	2017	2016	2017	2016
Securities	8 327 363	7 981 198	(9 385 392)	(10 253 370)
Others	1 359 641	1 274 760	(936 332)	(454 973)
Total	**9 687 004**	**9 255 958**	**(10 321 724)**	**(10 708 343)**

NOTE 31 - INCOME FROM PARTICIPATING INTERESTS

The ECB's seigniorage income, which arises from the 8% share of euro banknotes allocated to the ECB, as well as the income arising from the securities held under (a) SMP, (b) CBPP3, (c) ABSPP and (d) PSPP is due to the euro area NCBs in the financial year in which it accrues. Unless otherwise decided by the Governing Council, the ECB distributes this income in January of the following year by means of an interim distribution of profit.

It is distributed in full unless it is higher than the ECB's net profit for the year, and subject to any decisions by the Governing Council to make transfers to the provision for foreign exchange rate, interest rate, credit and gold price risks. The Governing Council may also decide to reduce the amount of the income on euro banknotes in circulation, to be distributed in January, by the amount of the costs incurred by the ECB in connection with the issue and handling of euro banknotes.

In 2017, the BCL received 3.6 million euro from the ECB.

In 2017, the BCL also received a dividend of 0.9 million SDR (1.1 million euro) due to the participating interest held in the Bank for International Settlements (BIS).

In total, this item amounts to 4.7 million euro as at 31 December 2017 (4.3 million euro on 31 December 2016).

NOTE 32 - NET RESULT OF POOLING OF MONETARY INCOME

The monetary income of each Eurosystem NCB is determined by measuring the actual annual income that derives from the earmarkable assets held against its liability base. The liability base consists mainly of the following items:

- banknotes in circulation;
- liabilities to credit institutions related to monetary policy operations denominated in euro;
- net intra-Eurosystem liabilities resulting from TARGET2 transactions;
- net intra-Eurosystem liabilities related to the allocation of euro banknotes within the Eurosystem;
- accrued interest recorded at quarter-end by each NCB on monetary policy liabilities the maturity of which is one year or longer.

Any interest paid on liabilities included within the liability base is to be deducted from the monetary income to be pooled.

The earmarkable assets consist of the following items:

- lending to euro area credit institutions related to monetary policy operations denominated in euro;
- securities held for monetary policy purposes;
- intra-Eurosystem claims equivalent to the transfer of foreign reserve assets to the ECB;
- net intra-Eurosystem claims resulting from TARGET2 transactions;
- net intra-Eurosystem claims related to the allocation of euro banknotes within the Eurosystem;
- accrued interest recorded at quarter-end by each NCB on monetary policy assets the maturity of which is one year or longer;
- a limited amount of each NCBs' gold holdings in proportion to each NCB's capital key share.

The amount of each NCB's monetary income shall be determined by measuring the actual income that derives from the earmarkable assets recorded in its books. As an exception to this, gold is considered as generating no income and the following are considered to generate income at the latest available marginal interest rate used by the Eurosystem in its tenders for main refinancing operations: (i) securities held for monetary purposes under Decision ECB/2009/16 of 2 July 2009 on the implementation of the covered bonds purchase programme, (ii) securities held for monetary policy purposes under Decision ECB/2011/17 of 3 November 2011 on the implementation of the second covered bonds purchase programme and (iii) debt instruments issued by central, regional and local governments and recognised agencies and substitute debt instruments issued by public non-financial corporations under Decision ECB/2015/10 of 4 March 2015 on the implementation of a secondary markets public sector asset purchase programme.

Where the value of an NCB's earmarkable assets exceeds or falls short of the value of its liability base, the difference shall be offset by applying to the value of the difference the latest available marginal rate for the Eurosystem's main refinancing operations.

The monetary income pooled by the Eurosystem is allocated among NCBs according to the subscribed capital key set at 0.28839% since 1 January 2015.

This item includes the net monetary income allocated to the BCL for 2017 representing an expense amounting to 329 600 956 euro (expense of 217 766 888 euro on 31 December 2016).

As at 31 December 2017, this item also contains the BCL's share in the provision against losses in monetary policy operations, which was established in relation to a security held by an NCB of the Eurosystem in its CSPP portfolio (see Note 20 "Provisions").

NOTE 33 - OTHER INCOME

Other income includes revenue for services rendered to third parties, adjustments to prior years' accruals, income from numismatic activities and the recovered functioning costs of EPCO (Eurosystem Procurement Co-ordination Office).

Other income includes also, when appropriate, the BCL's revenue from financial agreements between the Government of Luxembourg and the BCL.

NOTE 34 - STAFF COSTS

	2017 EUR	2016 EUR
Gross wages and salaries	(40 455 012)	(37 060 345)
Other staff costs	(2 036 336)	(2 258 593)
	(42 491 348)	**(39 318 938)**

This item includes the gross wages and salaries, compensations as well as other staff costs (the employer's share of contributions to the social security scheme and meal vouchers).

The amount relevant to the Board of Directors, including the amounts of the representation expenses as decided by Government in council, amounted to 727 237 euro for the year 2017 (726 196 euro for the year 2016).

As at 31 December 2017, the BCL employed 378 persons (360 on 31 December 2016). The average number of persons working for the BCL from 1 January to 31 December 2017 was 368 (355 for the year 2016).

NOTE 35 – BCL'S CONTRIBUTION TO THE LEGAL PENSION SCHEME OF ITS STAFF

	2017 EUR	2016 EUR
Notional employer's share	(6 466 083)	(5 938 502)
Adjustments to the pension liabilities	(4 790 753)	(13 152 134)
	(11 256 836)	**(19 090 636)**

This item includes the notional employer's share of the BCL determined on the basis of the gross wages and salaries for an amount of 6.5 million euro as well as the contribution of the BCL for an amount of 4.8 million euro as a result of the revaluation of pension liabilities (see also Note 20.2 "Provisions for pensions"). It is worth noting that the BCL contribution amounted to 13.2 million euro in 2016.

NOTE 36 - OTHER ADMINISTRATIVE EXPENSES

This item includes indemnities incurred in order to align the BCL's workforce to its needs from both a recruitment and a qualification perspective, indemnities for hierarchical responsibility initiated in 2017, expenses for external consultants, leasing, cleaning and repairing of buildings and equipment, small goods and materials, other services and supplies. It also includes expenses in relation to the Council meeting amounted to 99 389 euro for 2017, of which 91 557 euro for indemnities paid to the members of the Council (93 445 euro for 2016, of which 89 356 euro for indemnities).

NOTE 37 - DEPRECIATION OF TANGIBLE AND INTANGIBLE ASSETS

This item shows the depreciation applied on buildings, renovations on buildings, furniture and office equipment, computer hardware and software.

NOTE 38 - BANKNOTE PRODUCTION SERVICES

This item shows mainly the costs relating to the production and issue of banknotes denominated in euro.

NOTE 39 - OTHER EXPENSES

This item includes in particular costs relating to numismatic activities.

NOTE 40 - RESULT FOR THE YEAR

	2017 EUR	2016 EUR
Profit for the year	1 960 764	1 810 813

The fiscal year 2017 shows a profit of 1 960 764 euro (profit of 1 810 813 euro in 2016).

When taking into consideration the BCL's obligation or objective respectively relating to pension (see Note 20.2) and the provision for banking risks (see Note 20.1), the provisional results indicate a trend towards a significant structural loss.

03 ANNEXES

Emily Young: *Angel Head*, BCL Collection

3
ANNEXES

3.1 BCL REGULATIONS PUBLISHED IN 2017

No regulation has been published in 2017.

For a complete list of regulations published by the BCL, please visit the BCL's website (www.bcl.lu).

3.2 LIST OF BCL CIRCULARS PUBLISHED IN 2017

Circular n° 240 of 21 April 2017

Introduction of a granular data collection on credit and credit risk – to all credit institutions.

For a complete list of circulars published by the BCL, please visit the BCL's website (www.bcl.lu).

3.3 LIST OF BCL PUBLICATIONS PUBLISHED IN 2017

3.3.1 BCL bulletins

- BCL Bulletin 2017/1, June 2017
- BCL Bulletin 2017/2, October 2017
- BCL Bulletin 2017/3, February 2018
- BCL Financial Stability Review, May 2017

For a complete list of bulletins published by the BCL, please visit the BCL's website (www.bcl.lu).

3.3.2 BCL annual report

- Annual Report 2016, French version, July 2017
- Annual Report 2016, English version, September 2017

For a complete list of annual reports published by the BCL, please visit the BCL's website (www.bcl.lu).

3.3.3 BCL working papers

- Working Paper n° 114, October 2017
  Capturing Macroprudential Regulation Effectiveness: A DSGE Approach with Shadow Intermediaries, by Federico Lubello and Abdelaziz Rouabah.

- Working Paper n° 113, September 2017
  Household debt burden and financial vulnerability in Luxembourg, by Gaston Giordana and Michael Ziegelmeyer.

- Working Paper n° 112, August 2017
  What Drives Gross Flows in Equity and Investment Fund Shares in Luxembourg? by Gabriele Di Filippo.

- Working Paper n° 111, July 2017
  Financial Regulation and Shadow Banking: A Small-Scale DSGE Perspective, by Patrick Fève and Olivier Pierrard.

- Working Paper n° 110, June 2017
  Active labour market policies and short-time work arrangements: Evidence from a survey of Luxembourg firms, by Konstantinos Efstathiou, Thomas Y. Mathä, Cindy Veiga and Ladislav Wintr.

- Working Paper n° 109, June 2017
  Systemic Financial Sector and Sovereign Risks, by Xisong Jin and Francisco Nadal de Simone.

- Working Paper n° 108, May 2017
  Public debt, central bank and money: some clarifications, by Paul MERCIER

- Working Paper n° 107, May 2017
  Firm Growth in Europe: an Overview based on the CompNet Labour Module, by C. Fernández, R. García, P. Lopez-Garcia, B. Marzinotto, R. Serafini, J. Vanhala and L. Wintr.

- Working Paper n° 106, May 2017
  The Luxembourg Household Finance Consumption Survey: Results from the 2nd wave, by Anastasia Girshina, Thomas Y. Mathä and Michael Ziegelmeyer.

- Working Paper n° 105, March 2017
  Investment Price Rigidity and Business Cycles, by Alban Moura.

For a complete list of working papers published by the BCL, please visit the BCL's website (www.bcl.lu).

3.3.4 BCL brochures

- La Banque centrale du Luxembourg, French version, January 2018
- The Banque centrale du Luxembourg, English version, April 2018
- Die Banque centrale du Luxembourg, German version, April 2018
- Brochure of the BCL's numismatic products (2018)

3.3.5 Information material about the security features of Euro banknotes and coins

For a complete list of the information material concerning the security features of Euro banknotes and coins, please visit the BCL's website (www.bcl.lu).

3.3.6 Publications and external presentations of BCL staff

3.3.6.1 External publications of the BCL's staff members

- Bouchet, M., L. Marchiori and O. Pierrard (2017) Pension reform in a worst case scenario: public finance versus political feasibility, Journal of Pension Economics and Finance, 16(2): 173-204, http://dx.doi.org/10.1017/S1474747215000451.

- Ehrmann, M. and M. Ziegelmeyer (2017) Mortgage choice in the euro area - Macroeconomic determinants and the effect of monetary policy on debt, Journal of Money, Credit and Banking 49(2-3): 469-494.

- Giordana, G. and I. Schumacher (2017) An empirical study on the impact of Basel III standards on banks' default risk: the case of Luxembourg, Journal of Risk and Financial Management 10(2): 8; http://dx.doi.org/10.3390/jrfm10020008.

- Giordana, G. and M. Ziegelmeyer (2017: Household debt burden and financial vulnerability in Luxembourg, in IFC Bulletins chapters, in: Bank for International Settlements (ed.), Data Needs and Statistics Compilation for Macroprudential Analysis 46, Bank for International Settlements.

- Marchiori, L. and O. Pierrard (2017) How does global demand for financial services promote domestic growth in Luxembourg? A dynamic general equilibrium analysis, Economic Modelling 62: 102-123.

- Marchiori, L., O. Pierrard and H. Sneessens (2017) The EU-US Unemployment Puzzle Revisited: Institutions, Demography and Capital Flows, Journal of Demographic Economics.

- Marchiori, L., P. Pieretti and B. Zou (2017) Immigration, occupational choice and public employment, Annales d'Economie et de Statistique – Annals of Economics and Statistics. Forthcoming.

- Mathä, T., A. Porpiglia and M. Ziegelmeyer (2017) Cross-Border Commuting and Consuming: An Empirical Investigation, Applied Economics 49(20): 2011-2026, http://dx.doi.org/10.1080/00036846.2016.1231902.

- Mathä, T., A. Porpiglia and M. Ziegelmeyer (2017) Household wealth in the euro area: The importance of intergenerational transfers, homeownership and house price dynamics, Journal of Housing Economics 35: 1-12, http://dx.doi.org/10.1016/j.jhe.2016.12.001.

- Mathä, T. and A. Shwachman Kaminaga (2017) Regional Wages and Market Potential in the Enlarged EU: An Empirical Investigation, Applied Economics 49(4): 376-385, http://dx.doi.org/10.1080/00036846.2016.1197372.

- Moura, A. (2018) Investment Shocks, Sticky Prices, and the Endogenous Relative Price of Investment, Review of Economic Dynamics 27: 46-63.

3.3.6.2 External presentations

- 5th Conference on Household Finance and Consumption at Banque de France, Paris, France, 14-15 December 2017.

- UniGR meeting on Labour and Personnel Economics, Institut für Arbeitsrecht und Arbeitsbeziehungen in der Europäischen Union (IAAEU) Trier, November 2017.

- 29th Annual conference of the European Association Labour Economists (EALE), St. Gallen, Switzerland, 21-23 September 2017.

- 1st Research Conference of the CEPR Network on Macroeconomic Modelling, Goethe University Frankfurt, June 2017.

- 5th Luxembourg Household Finance and Consumption Workshop, Banque centrale du Luxembourg, 29-30 June 2017.

- IFC – National Bank of Belgium Workshop on Data needs and Statistics compilation for macroprudential analysis, Brussels, Belgium, 18-19 May 2017.

- 5th Workshop on Empirical Economics, Ghent University, Belgium, 15-16 May 2017.

- Royal Economic Society (RES) annual conference, Bristol, United Kingdom, 10-12 April 2017.

- HFCS-CESEE Workshop on How to use survey data for analyzing financial stability in CESEE countries, Vienna, Austria, 26-27 January 2017.

- 4th Research Workshop of the MPC Task Force on Banking Analysis for Monetary Policy, Vienna, Austria, January 2017.

3.4 EUROPEAN CENTRAL BANK PUBLICATIONS

For a complete list of documents published by the European Central Bank, as well as for the translated versions in all official languages of the European Union, please visit the ECB's website (www.ecb.int).

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3.6 LIST OF ABBREVIATIONS

ABBL	Association des Banques et Banquiers, Luxembourg
ABS	Asset-Backed Securities
ATTF	Agence de transfert de technologie financière (*Luxembourg Agency for the Transfer of Financial Technology*)
BCL	Banque centrale du Luxembourg
BIS	Bank for International Settlement
CCBM	Correspondent central banking model
CETREL	Centre des transferts électroniques Luxembourg (*Center for Electronic Transfers Luxembourg*)
CLS	Continuous linked settlement
CPMI	Committee on Payments and Market Infrastructure
CPSS	Committee on Payment and Settlement
CRD	Capital Requirement Directive
CRR	Capital Requirement Regulation
CSD	Central Securities Depositories

CSSF	Commission de surveillance du secteur financier
EBA	European Banking Authority
ECAF	Eurosystem Credit Assessment Framework
ECB	European Central Bank
EFC	Economic and Financial Committee
EFSF	European Financial Stability Facility
EIB	European Investment Bank
EMU	Economic and Monetary Union
EPC	European Payments Council
ESCB	European System of Central Banks
ESM	European Stability Mechanism
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EU	European Union
EUR	Euro
EUROSTAT	Statistical office of the European communities
FSB	Financial Stability Board
GDP	Gross Domestic Product
IMF	International Monetary Fund
IML	Institut Monétaire Luxembourgeois
IOSCO	International Organization of Securities Commissions
LCR	Liquidity Coverage Ratio
LFF	Luxembourg for Finance
LSF	Luxembourg School of Finance
LTRO	Longer Term Refinancing Operations
LU	Luxembourg
MRA	Maximum Risk Allowance
MRO	Main Refinancing Operations
NCB	National Central Banks
NSFR	Net Stable Funding Ratio
OECD	Organisation for Economic Cooperation and Development
PBC	People's Bank of China
SDR	Special Drawing Rights
SEPA	Single European Payment Area
SSM	Single Supervisory Mechanism
SSS	Securities settlement system
STATEC	Institut national de la statistique et des études économiques (National Institute for Statistics and Economic Studies)
TARGET	Trans-European Automated Real-time Gross settlement Express Transfer system
TFEU	Treaty on the Functioning of the European Union
UCI	Undertaking for Collective Investments
UCITS	Undertaking for Collective Investments in Transferable Securities
USD	US Dollar

3.7 GLOSSARY

Balance of payments (b.o.p.): a statistical statement that summarises, for a specific period of time, the economic transactions of an economy with the rest of the world. The transactions considered are those involving goods, services and incomes; those involving financial claims on, and liabilities to, the rest of the world; and those (such as debt forgiveness) that are classified as transfers.

Central securities depository (CSD): an entity that (i) enables securities transactions to be processed and settled by book entry, and (ii) provides custodial services (e.g. the administration of corporate actions and redemptions), and (iii) plays an active role in ensuring the integrity of securities issues. Securities can be held in physical (but immobilised) form or in dematerialized form (whereby they exist only as electronic records).

Collateral: assets pledged or otherwise transferred (e.g. by credit institutions to central banks) as a guarantee for the repayment of loans, as well as assets sold (e.g. by credit institutions to central banks) under repurchase agreements.

Corporate sector purchase programme (CSPP): On 10 March 2016, the Governing Council decided to establish a new programme to purchase investment-grade euro-denominated bonds issued by non-bank corporations established in the euro area with the aim of further strengthening the pass-through of the conventional policy measures to the real economy by improving directly the financing conditions of the euro area companies.

Correspondent Central Banking Model (CCBM): a mechanism established by the European System of Central Banks with the aim of enabling counterparties to use eligible collateral on a cross-border basis. In the CCBM, NCBs act as custodians for one another. Each NCB has a securities account in its securities administration for each of the other NCBs (and for the European Central Bank).

Council of the European Union: the institution of the EU made up of representatives of the governments of the EU Member States, normally ministers responsible for the matters under consideration and the relevant European Commissioner (see also ECOFIN Council).

Counterparty: the opposite party in a financial transaction (e.g. any party transacting with a central bank).

Covered bond purchase programmes (CBPP, CBPP2 and CBPP3): an ECB programme, based on the decision of the Governing Council of 7 May 2009 to purchase euro-denominated covered bonds issued in the euro area in support of a specific financial market segment that is important for the funding of banks and was particularly affected by the financial crisis. The purchases under the programme were for a nominal value of 60 billion euro and they were fully implemented by 30 June 2010. On 6 October 2011 the Governing Council decided to launch a second covered bond purchase programme, the CBPP2. Between November 2011 and October 2012, a nominal amount of € 16.4 billion was purchased on the primary and secondary markets. The CBBP2 ended in November 2012. On 4 September 2014, the Governing Council decided to launch a new euro-denominated covered bonds purchase programme (CBPP3) in the primary and secondary markets.

CPMI-IOSCO: The Committee on Payments and Market Infrastructures (CPMI) promotes the safety and efficiency of payment, clearing and securities settlement related arrangements. The CPMI monitors and analyses developments in these arrangements and is a global standard setter in this area. It also serves as a forum for central bank cooperation in related oversight, policy and operational matters.

The International Organization of Securities Commissions (IOSCO) is a body that brings together the world's securities regulators. The organization develops among others internationally recognized standards of regulation, oversight and enforcement aiming at protecting investors and promoting integrity of securities markets.

Credit institution: 1) an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account; or 2) an undertaking or any other legal person, other than those under (1), which issues means of payment in the form of electronic money. The most common types of credit institutions are banks and saving banks. See also electronic money (e-money).

ECOFIN Council: Council of the European Union reuniting/meeting at the level of the ministers of economics and finance.

Economic and Financial Committee (EFC): a committee which contributes to the preparation of the work of the ECOFIN Council and the European Commission. Its tasks include reviewing the economic and financial situation of both Member States and the EU, and contributing to budgetary surveillance.

Electronic money (e-money): An electronic store of monetary value on a technical device that may be widely used as prepaid bearer instrument for making payments to undertakings other than the issuer, without necessarily involving bank accounts in the transactions.

Euro: The name of the European single currency adopted by the European council at its meeting in Madrid on 15 and 16 December 1995 and used instead of the term ECU originally employed in the Treaty.

EURO1: Multilateral net payment system providing same-day settlement at a pan-European level. EURO1 is operated by EBA Clearing and settles large-value interbank payments in euro.

Euro area: the area encompassing those Member States which have adopted the euro as the single currency in accordance with the Treaty and in which a single monetary policy is conducted under the responsibility of the Governing Council of the European Central Bank. The euro area currently comprises Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain.

Eurogroup: an informal gathering of the ministers of economy and finance of the EU Member States whose currency is the euro.

European Central Bank (ECB): the ECB lies at the centre of the Eurosystem and the European System of Central Banks (ESCB) and has its own legal personality in accordance with the Treaty (ARTICLE 282(3)). It ensures that the tasks conferred upon the Eurosystem and the ESCB are implemented either through its own activities or through those of the NCBs, pursuant to the Statute of the ESCB and the ECB. The Eurosystem and the SEBC are governed by the decision-making bodies of the ECB, i.e. by the Governing Council, by the Executive Board, and, as a third decision-making body, by the General Council.

European Financial Stabilisation Mechanism (EFSM): a European Union facility, based on Article 122(2) of the Treaty, enabling the Commission to raise up to € 60 billion on behalf of the European Union to finance loans to EU Member States experiencing serious difficulties or a serious threat of such difficulties due to exceptional events beyond their control. The loans thus granted are subject to strict conditionality under the joint programmes of the European Union and the IMF.

European Financial Stability Facility (EFSF): a limited liability company established by the euro area counterparties, on an intergovernmental basis, for the purpose of providing loans to the euro area countries in financial difficulties. Such financial assistance is subject to strong conditionality in the context of joint EU-IMF programmes. The EFSF has an effective lending capacity of € 440 billion, and its loans are financed through the issuance of debt securities, guaranteed by euro area countries on a pro rata basis.

European Stability Mechanism (ESM): an organisation established by the euro area countries, on an intergovernmental basis, offering a permanent crisis management mechanism, which aims to provide emergency financial support to euro area countries in need with a view to safeguarding the financial stability of the euro area as a whole. Its effective lending capacity is € 500 billion and is subject to strict conditionality.

European System of Central Banks (ESCB): composed of the European Central Bank (ECB) and the NCBs of all 28 EU Member States, i.e. it includes, in addition to the members of the Eurosystem, the NCBs of those Member States whose currency is not the euro. The ESCB is governed by the Governing Council and the Executive Board of the ECB, and, as a third decision-making body of the ECB, by the General Council.

European Systemic Risk Board (ESRB): an independent EU body responsible for the macro-prudential oversight of the financial system within the EU. It contributes to the prevention or mitigation of systemic risks to financial stability that arise from developments within the financial system, taking into account macroeconomic developments, so as to avoid periods of widespread financial distress.

Eurosystem: the central banking system of the euro area. It comprises the European Central Bank and the NCBs of the Member States that have adopted the euro.

Executive Board: one of the decision-making bodies of the ECB. It comprises the President and the Vice-President of the ECB and four other members appointed by the European Council, acting by a qualified majority, on a recommendation from the EU Council, after it has consulted the European Parliament and the ECB.

Expanded Asset Purchase Programme (APP): Following the first and second covered bond purchase programmes (CBPP and CBPP2) conducted respectively in 2009-10 and 2011-12, the expanded asset purchase programme (APP) includes all purchase programmes under which private sector securities and public sector securities are purchased to address the risks of a too prolonged period of low inflation. It consists of the third covered bond purchase programme (CBPP3), the asset-backed securities purchase programme (ABSPP), the public sector purchase programme (PSPP) and the corporate sector purchase programme (CSPP).

Fiduciary money: banknotes and coins having the status of legal tender.

Financial stability: condition in which the financial system- comprising financial intermediaries, markets and market infrastructures- is capable of with standing shocks and the unraveling of financial imbalances, thereby mitigating the likelihood of disruptions in the financial intermediation process which are severe enough to significantly impair the allocation of savings to profitable investment opportunities.

Fine-tuning operations: an open market operation executed by the Eurosystem in order to deal with unexpected liquidity fluctuations in the market. The frequency and maturity of fine-tuning operations are not standardised.

G10: The Group of Ten (G10) refers to the group of countries that have agreed to participate in the General Arrangements to Borrow (GAB), a supplementary borrowing arrangement that can be invoked if the IMF's resources are estimated to be below member's needs. The GAB was established in 1962, when the governments of eight IMF members—Belgium, Canada, France, Italy, Japan, the Netherlands, the United Kingdom, and the United States—and the central banks of two others, Germany and Sweden, agreed to make resources available to the IMF for drawings by participants and, under certain circumstances, for drawings by nonparticipants.

G20: The Group of Twenty (G20), refers to a group of key advanced and emerging market economies that was created in 1999, in response to the financial crisis in the late 1990s, to modernise the international financial architecture, strengthen policy coordination between its members, and promote financial stability. In recent years it has increasingly influenced the debate on the global economic and financial policy agenda.

The membership of the G20 comprises the G7 countries (Canada, France, Germany, Italy, Japan, United Kingdom and the United States), Argentina, Australia, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey and the European Union, which is represented by the rotating Council Presidency and the European Central Bank.

Jointly G20 members represent about 85 per cent of global gross domestic product, over 75 per cent of global trade, and two-thirds of the world's population.

General Council: one of the decision-making bodies of the European Central Bank (ECB). It comprises the President and the Vice-President of the ECB and the governors of all the NCBs of the European System of Central Banks.

Governing Council: supreme decision-making body of the European Central Bank (ECB). It comprises all the members of the Executive Board of the ECB and the governors of the NCBs of the Member States that have adopted the euro.

Harmonised index of the consumer prices (HICP): a measure of the development of consumer prices that is compiled by Eurostat and harmonised for all EU Member states.

Key ECB interest rates: the interest rates, set by the Governing Council, which reflect the monetary policy stance of the European Central Bank. They are the rates on the main refinancing operations, the marginal lending facility and the deposit facility.

Longer-term refinancing operations: a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a monthly standard tender and normally have a maturity of three months. During the financial market turmoil that started in August 2007, supplementary operations with maturities ranging from one maintenance period to one year were conducted, the frequency of which varied.

Main refinancing operations: a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a weekly standard tender and normally have a maturity of one week.

MFIs (monetary financial institutions): financial institutions which together form the money issuing sector of the euro area. These include the Eurosystem, resident credit institutions (as defined by Community law) and all other resident financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or invest in securities. The latter group consists predominantly of money market funds.

Open market operations: an operation executed on the initiative of a central bank to influence the financial market. With regard to their aims, regularity and procedures, Eurosystem open market operations can be divided into four categories: main refinancing operations; longer-term refinancing operations; fine-tuning operations; and structural operations. As for the instruments used, reverse transactions are the main open market instrument of the Eurosystem and can be employed in all four categories of operations. In addition, the issuance of debt certificates and outright transactions are available for structural operations, while outright transactions, foreign exchange swaps and the collection of fixed-term deposits are available for the conduct of fine-tuning operations.

Outright Monetary Transactions (OMTs): transactions that aim to safeguard an appropriate monetary policy transmission and the singleness of the monetary policy in the euro area through purchases of euro area government bonds in the secondary market based on strict and effective conditionality.

Outright transaction: A transaction whereby assets are bought or sold up to their maturity (spot or forward).

Price Stability: the maintenance of price stability is the primary objective of the Eurosystem. The Governing Council defines price stability as a year-on-year increase in the Harmonised Index of Consumer Prices for the euro area below 2%. The Governing Council has also made it clear that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term.

Public sector purchase programme (PSPP): On 22 January 2015 the Governing Council expanded its scope of intervention by announcing a securities purchase programme in the public sector (PSPP) scheduled to start on 09 March 2015. The PSPP was the latest of a suite of asset purchase programmes (APP), which included the asset-backed securities (ABSPP) and the covered bonds (CBPP3), aimed at addressing the risk of a of a too prolonged period of low inflation.
The secondary market transactions conducted under the PSPP include high quality euro-denominated instruments issued by the euro area central governments - or by regional and local governments that meet all other eligibility criteria - or by eligible international or supranational institutions and agencies established in the euro area.
The share of purchases in a national central bank's home market is conducted in proportions reflecting the respective share of the national central bank in the ECB's capital key.
Additional eligibility criteria apply to countries subject to an EU-IMF macroeconomic adjustment programme.

Real-time gross settlement (RTGS) system: a settlement system in which processing and settlement take place on a transaction-by transaction basis in real time (see also TARGET2).

SDR (Special Drawing Rights): The SDR was created by the IMF in 1969 as an international reserve asset to supplement its member countries' official reserves. Its value is currently based on a basket of four key international currencies: the euro, the Japanese yen, the pound sterling, and the US dollar. The SDR is neither a currency, nor a claim on the IMF. Rather, it is a potential claim on the freely usable currencies of IMF members.

Securities Markets Programme (SMP): a programme set up in May 2010 for conducting interventions in the euro area public and private debt securities markets to ensure depth and liquidity in dysfunctional market segments with a view to restoring an appropriate monetary policy transmission mechanism. The SMP was terminated when the technical features of the Outright Monetary Transactions were announced on 6 September 2012.

Securities settlement system (SSS): a system which allows the transfer of securities, either free of payment or against payment (delivery versus payment).

Single Resolution Mechanism (SRM): the European banking resolution system, composed of the Single Resolution Board (SRB), together with the Council and the Commission and the national resolution authorities of the participating Member States. Together with the Single Supervisory Mechanism, the SRM is one of the three pillars of the European Banking Union.

Single Supervisory Mechanism (SSM): the European banking supervisory system composed of the ECB and the national supervisory authorities and national central banks of the participating Member States. Together with the SRM, the SSM is one of the three pillars of the European banking union.

Stability and Growth Pact (SGP): intended to serve as a means of safeguarding sound government finances in the EU Member States in order to strengthen the conditions for price stability and for strong, sustainable growth conducive to employment creation. The SGP has two arms – a preventive arm and a corrective arm. The preventive arm prescribes that Member States specify medium-term budgetary objectives, while the corrective arm contains concrete specifications on the excessive deficit procedure.

Standing Facilities: Standing facilities aim to provide and absorb overnight liquidity, signal the general monetary policy stance and bound overnight market interest rates. Two standing facilities, which are administered in a decentralised manner by the NCBs, are available to eligible counterparties on their own initiative: the marginal lending facility and the deposit facility.

STEP2: Pan-European Automated Clearing House (PE-ACH) for retail payments in euro. The clearing house is operated by EBA Clearing.

Systemic Risk: the risk that the inability of one participant to meet its obligations in a system will cause other participants to be unable to meet their obligations when due, with possible spillover effects such as significant liquidity or credit problems that may threaten the stability of the financial system. Such inability may be caused by operational or financial problems.

TARGET2: the second-generation TARGET system. It settles payments in euro in central bank money and functions on the basis of a single shared IT platform, to which all payment orders are submitted for processing.

TARGET2-Securtities (T2S): the Eurosystem's single technical platform enabling central securities depositories and NCBs to provide core, borderless and neutral securities settlement services in central bank money in Europe.

Treaty on the Functioning of the European Union (TFEU): Following entry into force of the Treaty of Lisbon on 1 December 2009, the Treaty establishing the European Community was renamed the Treaty on the Functioning of the European Union (TFEU). This Treaty - referred to as the Treaty of Rome (signed in Rome on 25 March 1957) - entered into force on 1 January 1958 to establish the European Economic Community (EEC). The Treaty establishing the European Community was subsequently amended by the Treaty on European Union (often referred to as the Maastricht Treaty) which was signed on 7 February 1992 and entered into force on 1 November 1993, thereby establishing the EU. Thereafter, both the Treaty establishing the European Community and the Treaty on the European Union were amended by the Treaty of Amsterdam, signed on 1 October 1997 and in force as of 1 May 1999, the Treaty of Nice, signed on 28 February 2001 and in force as of 1 February 2003, and then by the Treaty of Lisbon.

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