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.

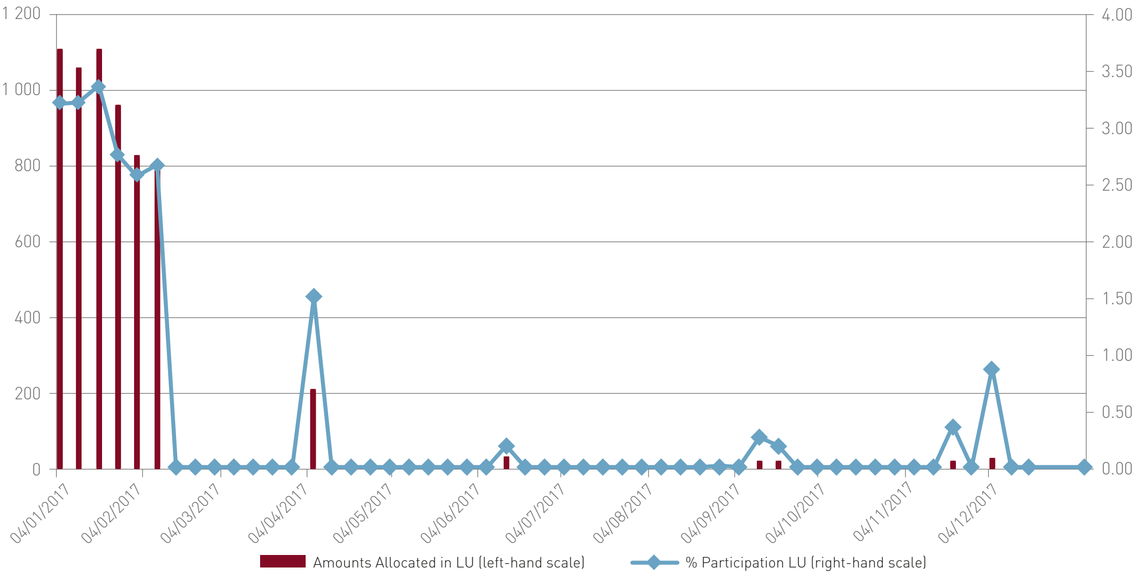
Table 1:
Average amounts per MRO allocated to the euro area as a whole and annual change

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)

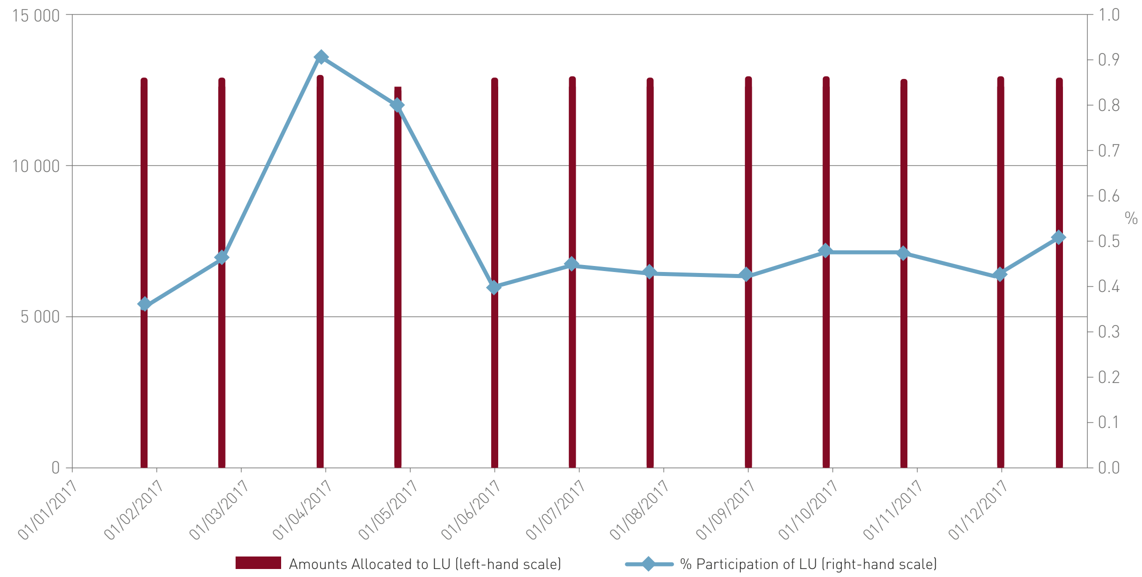


Source: BCL

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%.

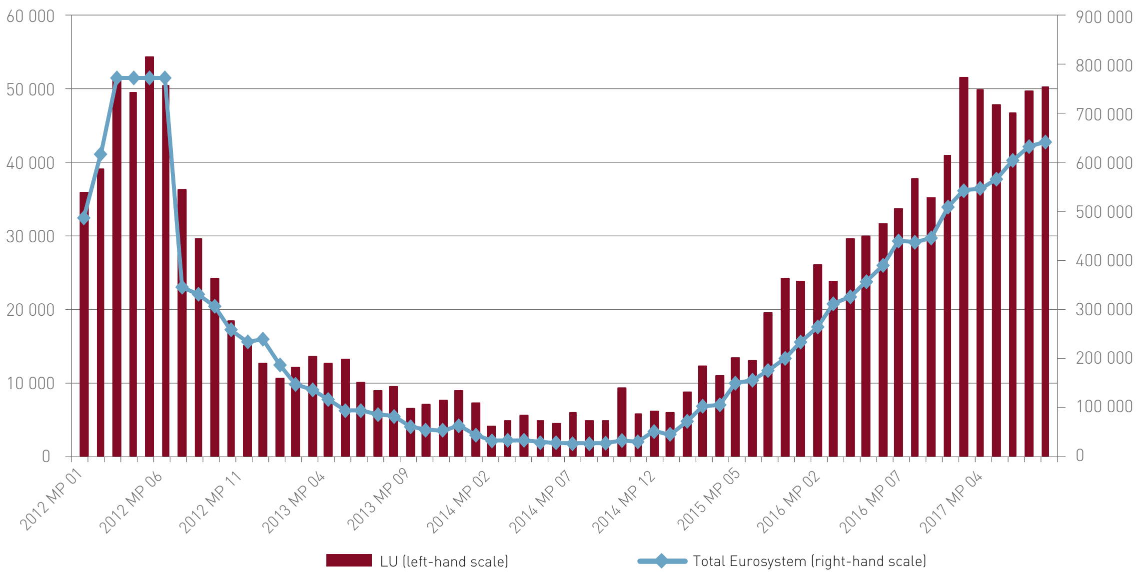
<u>Marginal lending facility</u>

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)



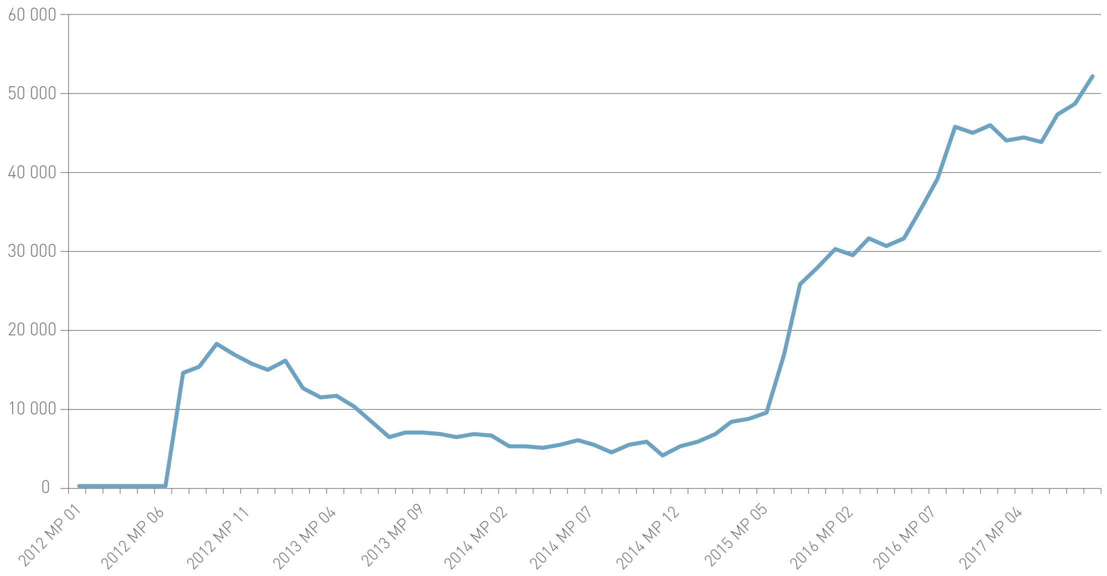
Source: BCL

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

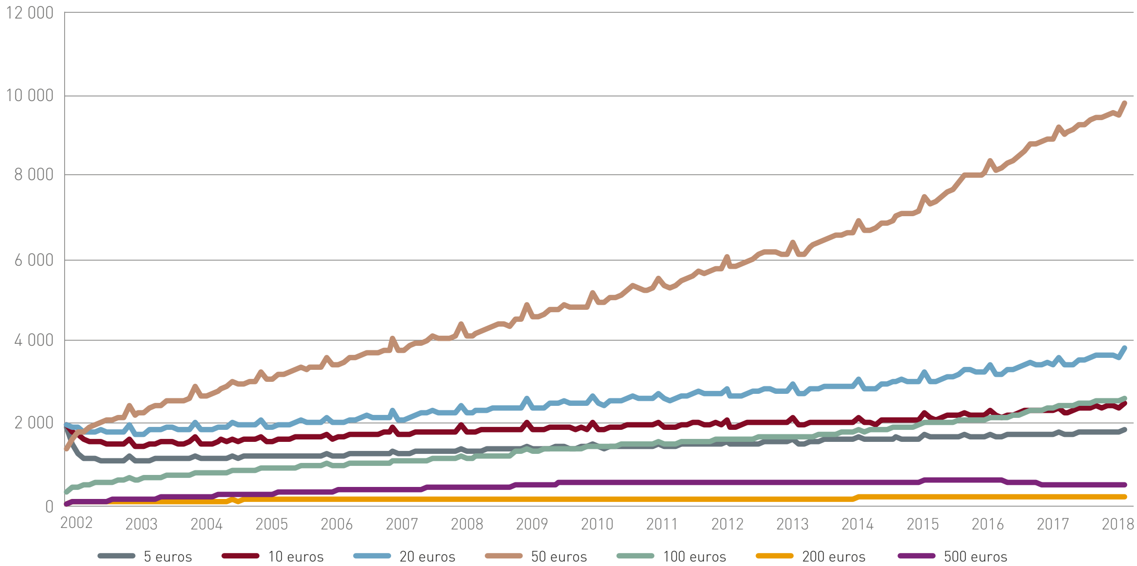
The total number of banknotes issued by the BCL in 2017 amounted to 7.6 million. The number of € 10 and € 20 banknotes deposited at the BCL exceeds the number of banknotes issued. Financial institutions have indeed deposited higher amounts of these banknotes at the BCL than the amount they withdrew. 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)

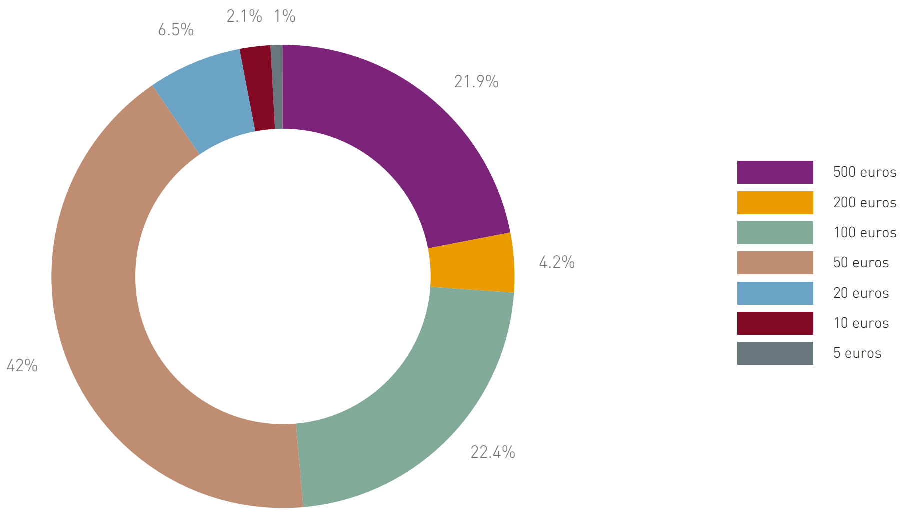


Source: ECB

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

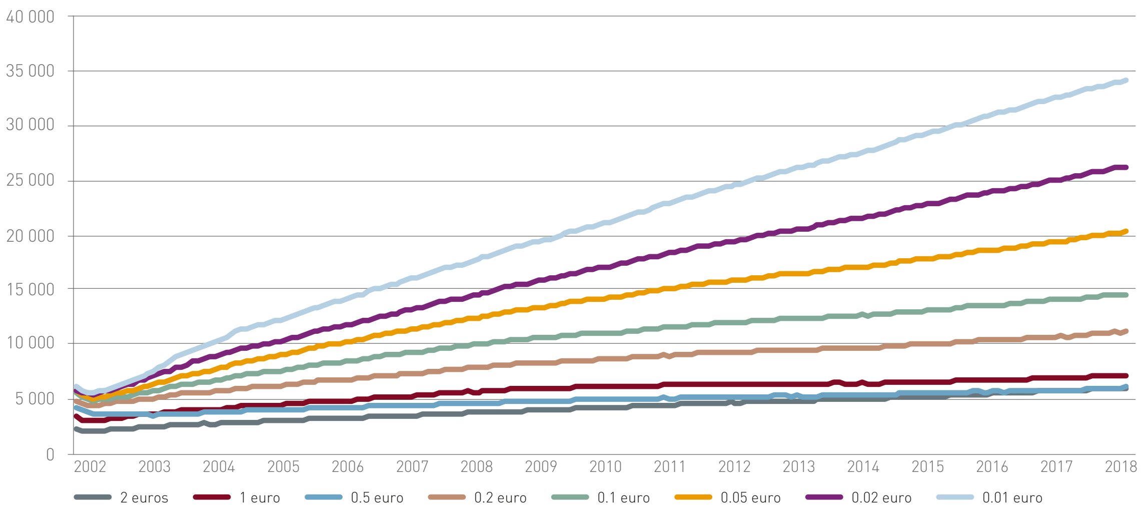


Source: ECB

1.4.2.1.2 Coins

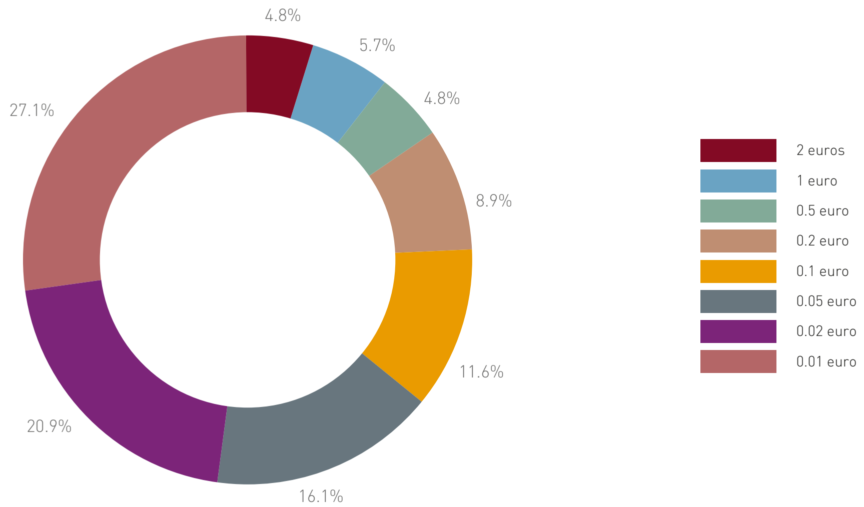
The volume of coins put into circulation in the course of the year 2017 increased by 26 million pieces, which equals a growth rate of 3.3%. At the euro area level, the total number of euro coins in circulation grew by 4.2%, reaching 126 million pieces. The value of euro coins in circulation in the euro 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]

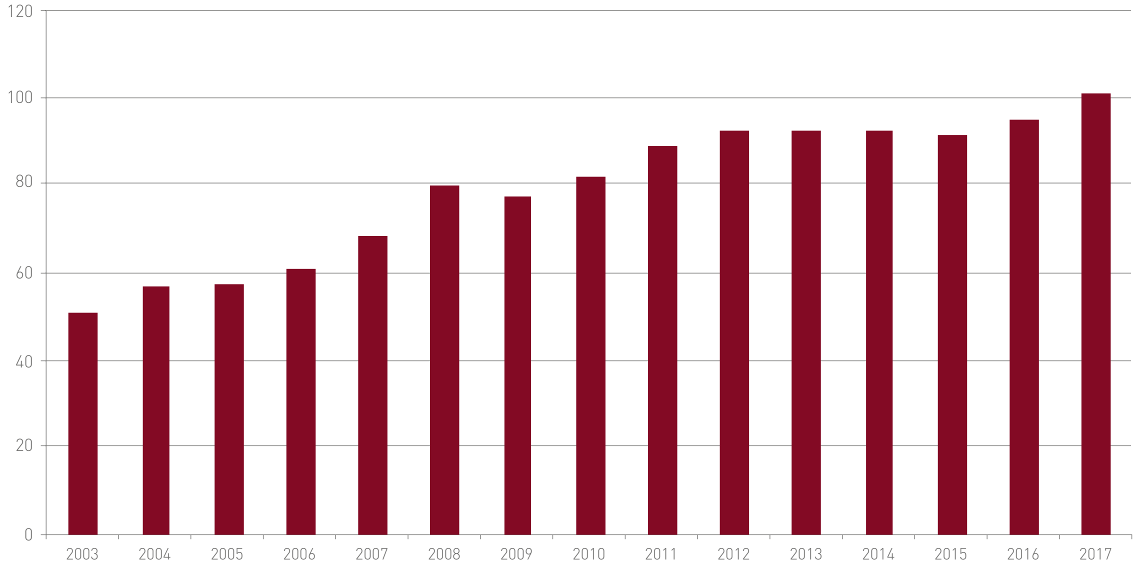
As of end-2004, coins denominated in LUF are neither exchanged nor reimbursed.

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

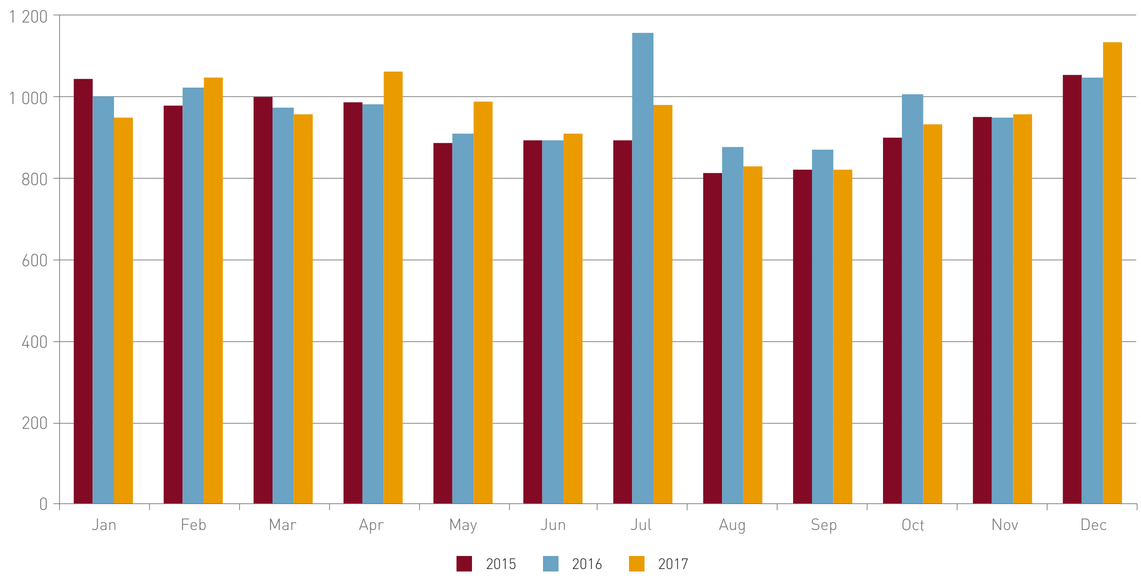
In 2017, participants in TARGET2-LU exchanged a monthly average of 20 419 payments (against 20 802 in 2016) for a value of € 77.5 billion – compared to € 83.2 billion in 2016. Of these payments, 12 694 or 62.2% were retail payments. Their value represented a monthly average of € 6.6 billion or 8.6 %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

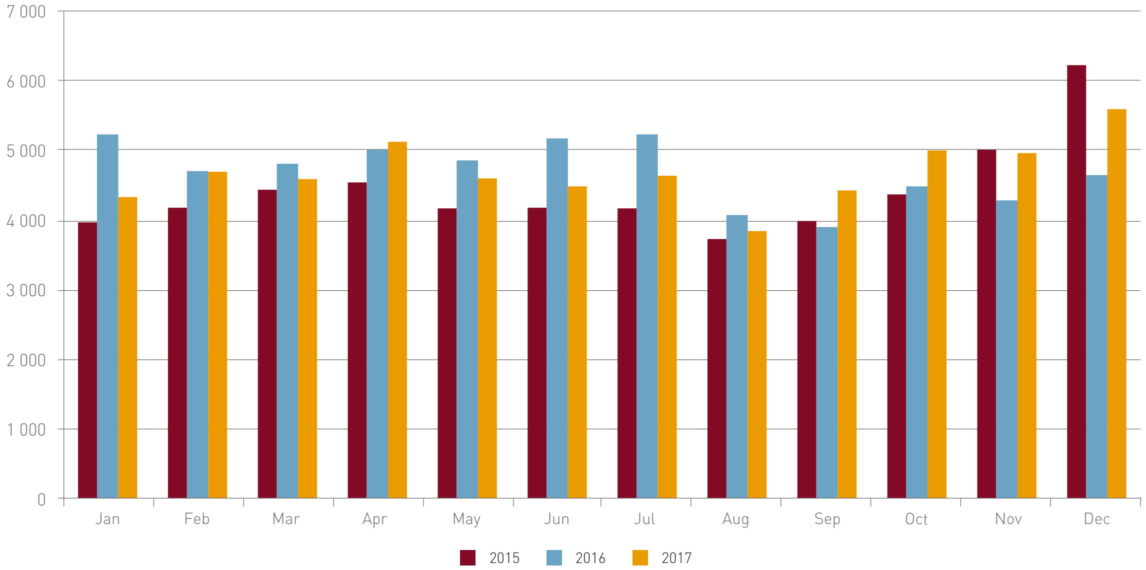
In value terms, the average monthly retail payments increased by 21.0% to an average of € 48.27 billion, representing 5.9% of the total value exchanged. The value of monthly interbank cross border payments increased by 25.1% to € 772.5 billion.

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

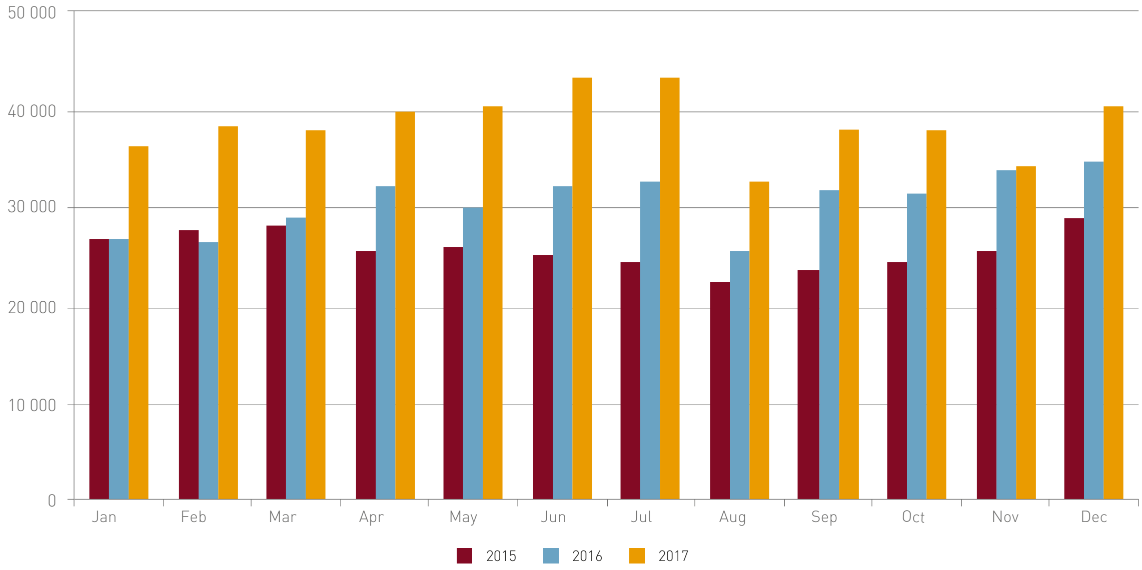


Sources: CRAKS1 / TARGET2

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

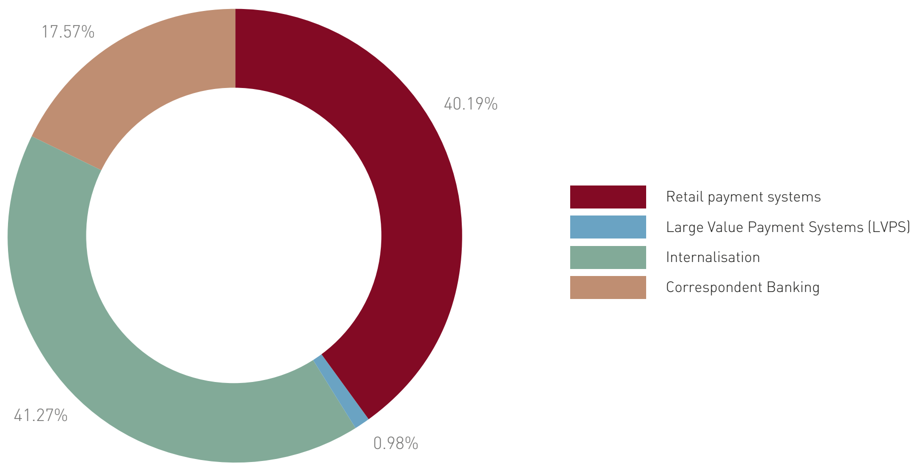
6 Cheques are no longer daily payment instruments; their usage is on the decrease.

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 Luxembboourg 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

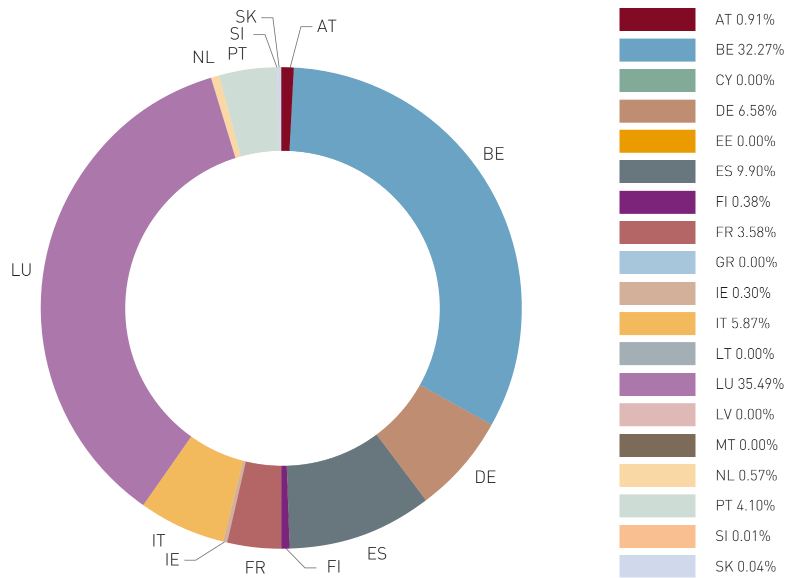
The Correspondent Central Banking Model (CCBM) enables all counterparties of the Eurosystem to use securities on a cross-border basis even if there is no eligible link between the national depository and the foreign depository in which the counterparty holds securities.

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 %).

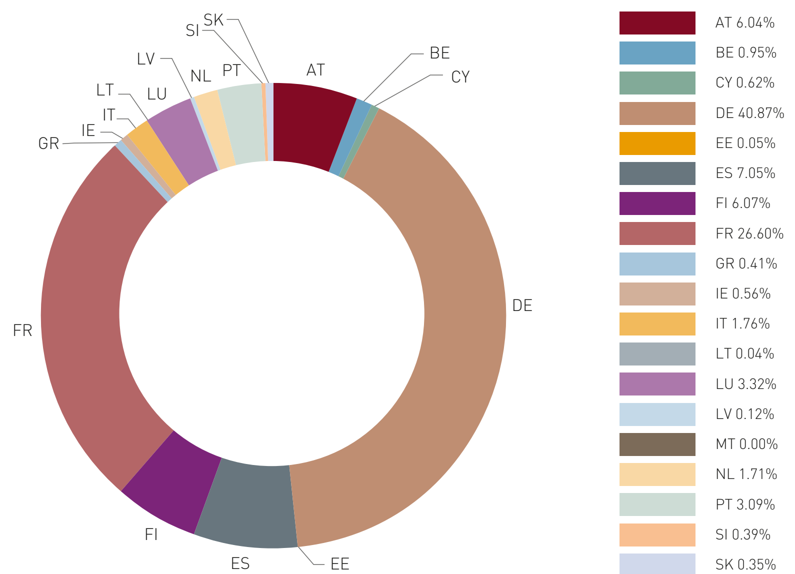
Graph 14:
Correspondent central bank 2017



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.

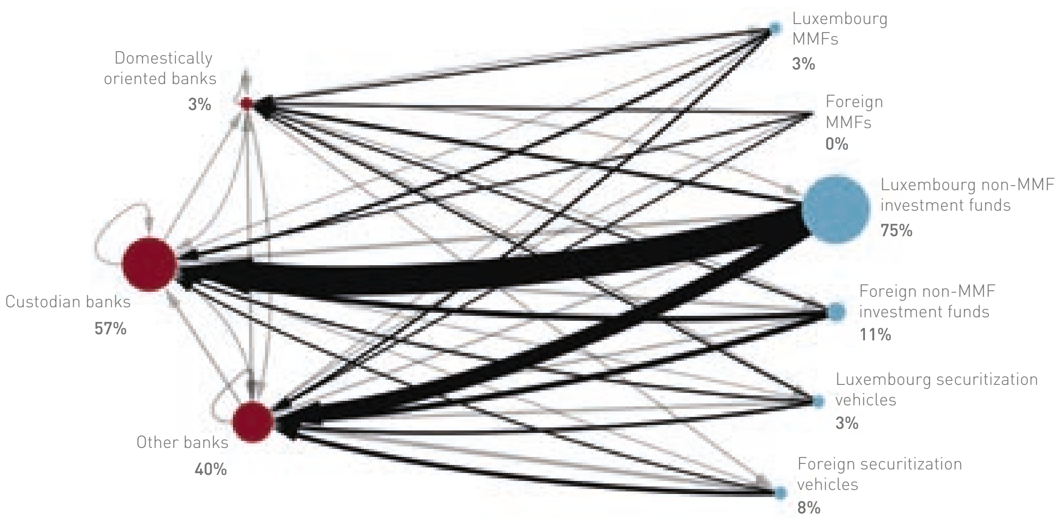
30 See Sub-Recommendation B-3 of the Recommendation of the ESRB on the macro-prudential mandate of national authorities (ESRB/2011/3).

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)

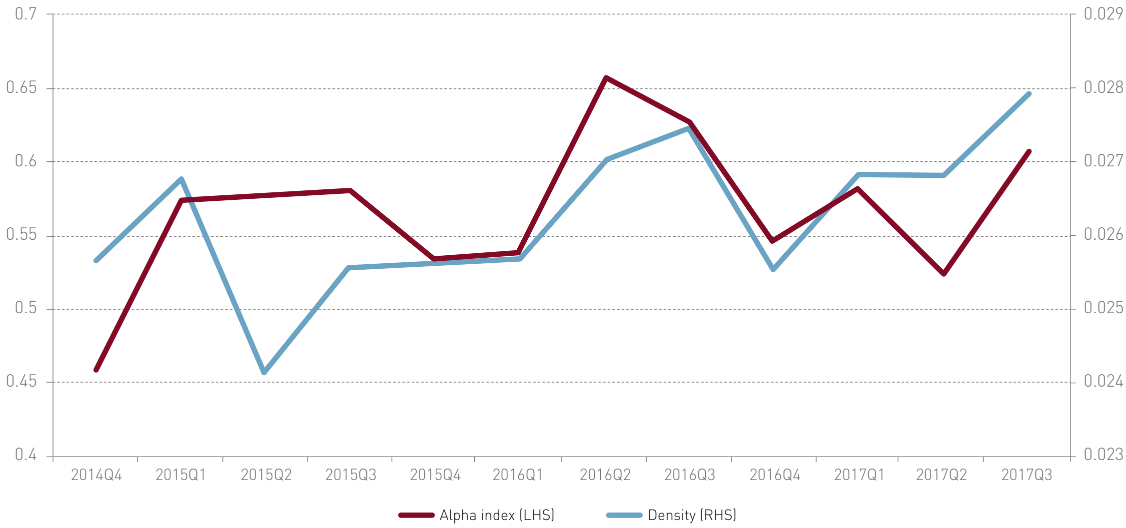


Source: BCL

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.

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.

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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.

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.

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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.

University cooperation

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.

Technical assistance

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.