BANQUE CENTRALE DU LUXEMBOURG ANNUAL REPORT 2000

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# ANNUAL REPORT 2000 SUMMARY



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Note to this Summary Report

This report presents an English summary of the *Rapport Annuel 2000* of the Banque centrale du Luxembourg, published in French on 24 April 2001.

The *Rapport Annuel 2000* may be requested free of charge from the BCL. It is also available on the BCL's website at www.bcl.lu (section "Publications").

### BANQUE CENTRALE DU LUXEMBOURG ANNUAL REPORT 2000

# GOVERNOR'S FOREWORD

The young Banque centrale du Luxembourg (BCL) continues to develop. The year 2000 was its second full year of activity. The Executive Board and the entire staff worked relentlessly throughout the year to ensure the effectiveness, the quality and the integrity expected of the Bank. The operational arrangements have been consolidated. The new headquarters is nearly nearing completion. The Bank should be able to conclude its start-up phase, after three years of legal existence, with its solemn inauguration on 18 May 2001.

This solidly based start of the Banque centrale du Luxembourg reflects that of the Europystem. The medium-term stability-orientated monetary policy conducted by the Governing Council of the European Central Bank, in which the Governor of the BCL participates as of right, has revealed its worth at a time characterised by volatile markets. The Europystem is engaged in preparing the public's use of euro banknotes and coins as from 1 January 2002. The Information Campaign Euro 2002 is proceeding at full speed. The preparations for this historically unique operation are well under way in Luxembourg.

The impressive development of the BCL's activities is shown by the expansion of its balance sheet. The financial centre of Luxembourg is one of the major participants in monetary policy operations within the Eurosystem.

The Luxembourg economy has once again experienced an absolutely remarkable growth at the European level. More than ever there is an evident need to manage a policy that takes this situation into account. A good combination of monetary and economic policy is a vital element in the achievement of a stable global economy and is the best guarantee of a harmonious future. Nevertheless, caution against inflationary risks is in order. Budgetary policy, as the European Commission reminded us, should be conducted in a way that does not aggravate cyclical downturns. Tax reductions have to be integrated into a well ordered economic management system. For Luxembourg, which has enjoyed an extended period of significant growth, the priority is to implement structural reforms: adapt infrastructures and adapt the fiscal and social framework. More than ever, good policies and appropriate rules must contribute to the competitiveness and performance of Luxembourg.

The financial centre, whose strength is essentially founded on the credit institutions and the diversification of their activities, has known an excellent year 2000. The perspective of harmonisation is a pressure that forces the financial centre to ensure its competitiveness. This applies also to the institutional framework, within which the coherence of national solutions for an adaptation of the supervisory systems applying to financial actors and services should be ensured. The continuous increase of investment funds and securities in general implies heightened vigilance on the part of the authorities. The financial centre must maintain human resources which are able to meet those challenges.

Let me pay a special tribute to Mr. Pierre Werner, former Prime Minister and Minister of State, who, for health reasons, has resigned from the Bank's Council. His outstanding service to monetary construction at the national as well as the Community level and his valuable contribution to the Banque centrale du Luxembourg fully justify the new building of the Bank, nearing completion, bearing his name.

Yves Mersch



## BANQUE CENTRALE DU LUXEMBOURG ANNUAL REPORT 2000

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# THE BCL IN 2000

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# 1 THE BCL IN 2000

### 1. The BCL's participation in the monetary and foreign exchange policy

### 1.1 Monetary policy instruments and their use made by the BCL

In Luxembourg, the Banque centrale du Luxembourg (BCL) is in charge of the execution of monetary policy as it is formulated by the European Central Bank (ECB) for the whole euro-zone.

To implement monetary policy decisions laid down by the Governing Council of the ECB, the BCL carries out a certain number of operations (open market operations) with its counterparties (credit institutions forming the Luxembourg financial centre). These so-called liquidity-providing operations have to be based on adequate collateral i.e. underlying assets aimed at protecting the Eurosystem from incurring losses in its monetary policy operations.

Open market operations are divided into:

- main refinancing operations which are conducted through weekly standard tenders and have a maturity of two weeks
- longer-term refinancing operationswhich are executed through monthly standard tenders and have a maturity of three months.

The BCL guarantees the implementation of the Eurosystem's minimum reserve system. This system, introduced on the 1st of January 1999, day of the official euro launch, applies to all the banks of the Luxembourg financial centre, whatever their judicial form or geographic origin.

The requirement for banking institutions to hold minimum reserves with the central bank aims at stabilising interest rates in the money market and, if necessary, may create or accentuate a structural liquidity deficit.

### - The switch to variable rate tenders in the main refinancing operations

At its meeting on 8 June 2000 the Governing Council of the ECB decided that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders, using the multiple rate auction technique. Furthermore, the Governing Council also decided to set a minimum bid rate for these operations. The background to this decision was the severe overbidding problem which had occurred under the fixed rate tender procedure.

In the new procedure the minimum bid rate signals the monetary policy stance, which previously used to be indicated by the rate applied to fixed rate tenders. Furthermore, an indication of the expected liquidity needs of the banking system will be published at the time of the announcement of the weekly auction. The Governing Council also emphasised that it will retain the option of reverting to fixed rate tenders, if and when this is deemed appropriate.

The switch to variable rate tenders was a response to the severe overbidding which had developed in the context of the fixed rate tender procedure. While the allotment ratio (i.e. the ratio between the amount allotted in the tender and the total amount of bids) averaged around 10% during 1999, it averaged only 2.7% in the period from 1 January to 7 June 2000. The strong rise in bids in the first half of 2000 was due to the fact that, during most of that period, there were market expectations of interest rate hikes and short-term money market rates were significantly above the main refinancing rate. This made it attractive for banks to bid for large amounts of liquidity from the central bank.

The new tender procedure introduces a price incentive which ensures that eligible counterparties submit bids which are more closely correlated to their needs.

### The characteristics of the variable rate tender procedure

Eligible counterparties may submit bids for up to ten different interest rate levels. In each bid they state the amount they are willing to transact with the Eurosystem and the respective interest rate. Bids at a

rate below the minimum bid rate are discarded. In the allotment the ECB lists bids from the highest to the lowest offered rate. The bids with the highest interest rates are accepted first and bids with successively lower rates are then accepted until the total liquidity to be allotted is exhausted. If, at the lowest interest rate level accepted (i.e. the marginal interest rate), the aggregate amount bid exceeds the amount still to be allotted, this will be allocated pro rata among the bids.

Source : ECB Monthly Bulletin, July 2000

The change in the tender procedure at the end of June 2000 (switch from a fixed to a variable rate tender procedure), in which the central bank provides liquidity to or withdraws liquidity from the market on the basis of bids submitted by counterparties in competition with each other, had also some results on the Luxembourg banking community. It allowed BCL's counterparties to see their bids better satisfied: the average liquidity volume allotted to local banks grew substantially.





BID & ALLOTMENT VOLUME IN LUXEMBOURG (VARIABLE RATE)



Concerning the volume of central bank money allotted, Luxembourg, as the smallest country of the members composing the euro area, ranked on the whole practically always at the 4th or 5th place in 2000.

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Compared to 1999 and despite a slight decrease towards the end of the year, the number of BCL's counterparties participating in tender operations remained roughly the same. For most of them, the number of bids and volume they were allotted in the different tender operations were quite regular. Even if the volume of operations to deal with increased substantially due to the switch in the tender procedure, the BCL did not have to face up major operational problems: this was largely due to the professionalism of its counterparties.



It is worth noting that in 2000 two fine-tuning operations took place.

A quick tender was launched at the beginning of the year to absorb excessive liquidity still in the market and which had been attributed to facilitate the switch to Y2K.

A second fine-tuning operation took place in June and was characterised by an injection of liquidity to restore appropriate liquidity conditions. In fact, one counterparty had unexpectedly resorted to the deposit facility and this for a big amount.

### - The minimum reserve system

In 2000, the average amount of minimum reserves held by credit institutions in Luxembourg was reached at 6.75 billion euro.



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In the minimum reserve system, the reserve requirement of an institution is calculated by multiplying the reserve ratio for each category of items in the reserve base with the amount of those items in the institution's balance sheet. In addition, institutions are allowed to deduct a lump-sum allowance from their reserve requirement.

In 2000, the rates at which minimum reserves were remunerated passed from 3% to 4.78%. As far as the management of minimum reserves by Luxembourg credit institutions in 2000 is concerned, attention has to be drawn on two major facts:

- during the second half of the year, the number of times banks had to pay penalties for not respecting their minimum reserve requirement increased,



- excess minimum reserves deposited with BCL and not remunerated, continue to reach high levels.





GRAPH 7:

DEVELOPMENT OF AVERAGE EXCESS RESERVES

It is worthy of note that since July 2000, the minimum reserve requirement is directly calculated by the credit institution itself which then communicates the calculated amount to the BCL.

### 2 Foreign exchange policy operations

### 2.1 The management of foreign exchange reserves by the BCL

According to the Statute of the European System of Central Banks (ESCB), the BCL, as a full member of the System, had to contribute to the ECB's capital. As a result, it transferred an amount of 74.6 million euro in foreign exchange assets, which corresponds to 0.1492% of the ECB's capital. The ECB's foreign exchange reserves are managed in a decentralised way by the national central banks and the BCL takes part in it since September 1999.

One goal of the management of the ECB's foreign exchange reserves is to make sure that if required, the ECB disposes of a sufficient amount of liquidity to intervene in the foreign exchange markets. Security and liquidity are therefore basic requirements for the management of these reserves.

The "tactical benchmark" is set up by taking into account the "strategic benchmark" for each currency. It reflects the ECB's medium preference as regards revenue and risk with reference to market conditions.

A modification of the "tactical benchmark" may affect different risk categories (for example modified duration or liquidity risk). The modified maturity of the "tactical benchmark" may differ from the modified maturity of the "strategic benchmark" in the context of fluctuation margins announced in advance by the ECB.

In the management of this portfolio, the first task of the BCL is to invest the foreign exchange reserves it was entrusted with by the ECB. This has to be done within the foreseen fluctuation margins and fixed risk limits with an aim of revenue maximisation.

The amount of assets in gold which are managed actively is fixed by the ECB by taking into account strategic considerations as well as market conditions.

### 2.2 The management of the BCL's assets

The management of the BCL's own assets corresponds to the principles laid down by the ECB. The investment policy underlying the management of the assets is based on the following criteria:

- cautious investment approach,
- fundamental macroeconomic analysis,
- organisation of the portfolio scheme,
- choice of the investment decisions,
- thorough control and well calculated risk-taking.

The BCL's investment policy is trying to achieve the following goals: generate regular high incomes and provide a lasting return on investment in the long term by taking into account various considerations such as capital security, stability of the securities and liquidity subject to investment.

For that reason and with respect to the principle of equal risk distribution, the BCL implements a proactive, progressive and matching investment policy based on modern portfolio theory.

The bulk of BCL's own assets is invested in fixed income securities denominated in euro. Yet, the BCL's strategic orientation allows a diversification to other categories of assets.

The investment policy committee has to define the investment policy of BCL's financial resources. Taking into account goals and constraints on an annual basis, the committee fixes a strategic orientation for the management of the portfolios by defining an appropriate framework for the investment policy and the determination of the "strategic benchmark" oriented to revenue collection and performance calculation.

The management committee takes charge of the tactical allocation and defines the main thrust of investment. The "tactical benchmark" is set up according to the "strategic benchmark", taking into account fluctuation margins. The attention is drawn on the tactical investment strategy in the short term.

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Given that the portfolios are exclusively invested in euro, the investment decisions are made by taking into account:

- the interest rate risks (average portfolio duration, yield curve position),
- the risk degree of markets (chosen sector, portfolio asset selection according to a given security, and in a lesser extent, to the geographic distribution by country).

Investment decisions are taken on the basis of technical and fundamental analysis, as well as on quantitative assessments. The management committee's role is to define reference factors which guide the management of the Bank's assets, to follow the investments up, to review the strategy and the realised performance. External standard benchmarks allow a regular measure of the performance.

The cautious investment approach takes into account:

- the analysis of the different (country) economies and international financial markets,
- the allocation decision of the assets under management by appreciating the investment returns on the different international markets,
- the definition of a clear strategy,
- the capital value preservation of the assets under management by a policy of risk diversification and the maintenance of a particular quality demand of investment,
- the applying of strict risk control measures.

To 31 December 2000, the total market value of securities and assets under management (accrued interest included) corresponded to 840.1 million euro, divided up into three portfolios.

### - "Liquidity Portfolio"

The first goal of this operational portfolio is to offer liquidity to face up to cash-flow fluctuations. The instruments used are mainly short term interbank deposits, CDs, commercial papers, operations of transfer and retrocession and the purchase of variable rate bonds.

### - "Investment Portfolios: Own Funds and Third-Party Funds"

The main goal of these two investment portfolios is to yield maximum interest.

Own and Third-Party funds portfolios follow a different investment strategy by taking into account particular demand as regards risk, revenue and liquidity. To 31 December 2000, the total market value of these funds (accrued interest included) represented 730.4 million euro.

In 2000, a big part of BCL's own funds has been invested in long term bonds, given that market conditions for that kind of investment were very favourable.

It is worth noting that the securities included in the "investment portfolios" are largely diversified according to the geographic location and credit risk of the issuer. Counterparty and credit risk limits are regularly set up and checked by the "risk management team".

### - "Outright Portfolio"

Several securities of this investment portfolio are used for outright transactions. Outright open market transactions refer to operations where the Eurosystem buys or sells assets outright in the market (spot or forward). Outright open market operations are executed only for structural and fine-tuning purposes. These operations aim to manage the liquidity situation in the market and to steer interest rates, in particular in order to smooth the effects on interest rates caused by unexpected liquidity fluctuations in the market.

### 3 Banking and monetary statistics

Data collection from monetary financial institutions' consolidated balance sheets has been marked by stability in 2000. However, conceptual issues have been raised in various other domains, such as statistics on bond emissions, interest rates and statistics on flow data.

### 3.1 Interest rates

During the year 2000, the Eurosystem began a detailed study of the needs in the statistical domain for

statistics on interest rates. In particular, Eurosystem requirements will be defined for payable and receivable interest rates applied by credit institutions on products offered to their customers.

### 3.2 Securities emissions

Within the framework of the single monetary policy, the Eurosystem needs information on securities emissions. This information constitutes an essential element of the monetary and financial analysis underlying the policy formation process.

### 3.3 Electronic money

Growth in electronic money usage requires more intensive monitoring even if it is still at an early stage. It has been decided to use existing information sources to collect data on electronic money.

### 3.4 Statistics on other financial intermediaries

The Eurosystem has begun the identification of those institutions who may belong to the sector 'other financial intermediaries', as defined by the European System of Accounts ESA95. These are mainly UCIs (Undertakings for Collective Investments) and other professionals in the financial sector.

### 3.5 Statistics on financial derivatives

The Eurosystem evaluates the needs for statistical information on financial derivatives. Once these needs are defined, an initial approach will be put into place to collect information from existing national sources.

### 3.6 Balance of payments and the external position of Luxembourg

Statistics on the balance of payments, international investment position, and foreign direct investment are important indicators for the analysis of international relations (economic, financial, and monetary). In view of diverging approaches and objectives among the multiple users of these data, the national compilation agencies of the balance of payments at the European level must ensure the production of data for each of the 12 countries in the euro zone and the others in the European Union.

Currently, information on external payments is collected by the IBLC (Institut Belgo-Luxembourgeois du Change), which receives data mainly from credit institutions. These data serve as a basis for the establishment for separate current accounts for Belgium and Luxembourg, as well as for the complete UEBL's (Union économique belgo-luxembourgeoise) balance of payments. At the beginning of the third phase of economic and monetary union, the governments of Luxembourg and Belgium took the decision to cease the activities of the IBLC on 1 January 2002; Belgium and Luxembourg will separately establish complete balance of payments from this moment onwards.

The law of 28 June 2000, which modifies the grand-ducal decree of 10 November 1944 with regard to exchange controls, stipulates that the BCL and the STATEC (Service Central des Statistiques et Etudes Economiques) are jointly responsible for the establishment of the balance of payments, the international investment position of Luxembourg and, by common agreement, the elaboration of a data collection system, as well as the associated methodology and the concepts and definitions.

The BCL is responsible for the establishment of financial operation accounts and the international investment position, as well as for the evaluation of the investment income statement. STATEC is responsible for the establishment of the capital account and the current account, with the exception of the investment income, as well as for Foreign Direct Investment surveys.

### 4 Payment and securities settlement systems

### 4.1 Evolution of LIPS-Gross

### RTGS-L Gie members

LIPS-Gross, the real time gross settlement system, started operations on 4 January 1999 with its 11 founding members and 20 additional banks. In 2000, a 32nd member joined the system.

### 4.2 Operations during the year 2000

In 2000, LIPS-Gross domestically operated a total of 61 135 payments (against 53 107 in 1999) for a global value of 1004 billion euro (723.6 billion euro in 1999). On a daily basis, an average of 240

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national payments with a total value of 6.9 billion euro were processed. In comparison to 1999, volumes increased by 15% and the value exchanged by 39%.

As far as interlinking payments are concerned, LIPS-Gross participants sent out 206 332 payments (against 160 912 in 1999) with a total value of 2 823 billion euro (2 140 billion euro in 1999) via TARGET. They received 248 180 payments (178 063 in 1999) with a total value of 2 816 billion euro (2 233 billion euro in 1999). As a daily average, 809 interlinking payment with a value of 11 069 million euro were sent out and 973 payments with a value of 11 044 million euro were received.

### TABLE 1: INTERLINKING PAYMENTS

	PAYMENTS SENT OUT	PAYMENTS RECEIVED	VALUE SENT OUT (EUR MILLIONS)	VALUE RECEIVED (EUR MILLIONS)
Daily average	809	973	11 069	11 044
Monthly average	17 194	20 682	235 210	234 684
Growth rate	+28%	+39%	+32%	+26%

The part of interlinking payments in all payments channelled through LIPS-Gross increased in 2000 and reached 88.1% of the volume and 84.9% of the value exchanged.

### 4.3 Evolution of the interbank netting system LIPS-Net

Following the smooth transition to the euro in 1999, the electronic interbank netting system LIPS-Net has confirmed its positive developments of preceeding years. Since manual compensation has been abandoned in 1998, LIPS-Net has turned into the banking industry's favourite financial transaction system for settling clients' transfer orders and cheques. Granting secure and fast transmission of financial flows between economic agents, the electronic netting system has developed over the years into an indispensable instrument for the national economy.

### TABLE 2:

### EVOLUTION OF PAYMENTS THROUGH LIPS-NET

	1999	2000	Variation
Number of transfer orders <sup>(1)</sup>	11,05	11,69	5,8%
Value of transfer orders (2)	32,8	39,6	20,7%
Average value of transfer orders	2 970	3 390	14,1%
Number of cheques	0,76	0,69	-10,1%
Value of cheques	3,6	4,1	13,9%
Average value of cheque	4 720	5 970	26,5%
Total number of transactions	11,81	12,37	4,8%
Total value of transactions	36,4	43.7	20,1%
Average value of transactions	3 080	3 530	14,6

(1) in million

(2) in billion euro

### 4.4 Eligible assets and their use for monetary policy operations

All Eurosystem credit operations are to be based on adequate collateral. Consequently, all Eurosystem liquidity-providing operations are based on underlying assets provided by the counterparties. With the aim of protecting the Eurosystem from incurring losses in its monetary policy operations, ensuring the equal treatment of counterparties and enhancing operational efficiency, underlying assets have to fulfil criteria in order to be eligible for Eurosystem monetary policy operations.

It is recognised that the harmonisation of eligibility criteria throughout the euro area would contribute to ensuring equal treatment and operational efficiency. At the same time, due attention has to be paid to existing differences in the financial structure across Member States. A distinction is therefore made, essentially for purposes internal to the Eurosystem, between two categories of assets eligible for Eurosystem monetary policy operations.

These two categories are referred to as "tier one" and "tier two" respectively:

- tier one consists of marketable debt instruments fulfilling uniform euro-area wide eligibility criteria specified by the ECB;
- tier two consists of additional assets, marketable and non marketable, which are of particular importance to national financial markets and banking systems and for which eligibility criteria are established by the national central banks, subject to the minimum eligibility criteria established by the ECB. The specific eligibility criteria for tier two applied by the respective national central banks are subject to approval by the ECB.

No distinction is made between the two tiers with regard to the quality of the assets and their eligibility for the various types of Eurosystem monetary policy operations (except for the fact that tier two assets are not normally used by the Eurosystem in outright transactions). The assets eligible for Eurosystem monetary policy operations can also be used as underlying assets for intraday credit.

At the end of December 2000, the domestic counterparties deposited eligible assets for a value estimated at 31.6 billion euro at the BCL. They were essentially made up of tier one assets (98.61%). 31.16% of these assets had been issued by central governments or local communities, 64.99% by credit institutions, 2.93% by corporates and 0.92% by supranational issuers.

### 4.5 Securities settlement systems

The interest of NCBs participating in the ESCB in securities settlement systems stems to a large extent from Protocol 3, chapter IV, article 18, paragraph 2 attached to the Treaty of the European Union, which says that: « In order to achieve the objectives set by the ESCB and to accomplish its missions, the European Central Bank and the national central banks may undertake credit operations with financial institutions and other market participants, with lending being based on adequate collateral ».

In order to make sure that « adequate collateral » was received by the central banks, the ESCB checks whether securities settlement systems correspond to high operational efficiency and technical security features, especially with regards to the handling of securities held on a cross-border basis (the so-called « cross-border use of collateral »).

Besides eligible domestic securities settled via the national Central Securities Depository (Clearstream Banking Luxembourg for Luxembourg participants), ESBC counterparties may receive credit from their local NCB using collateral located in another member state of the ESCB. This type of collateral can be mobilised using either the CCBM (Correspondent Central Banking Model), or links that the local depository has set up with other securities settlement systems and formally assessed by the ESCB.

82.7% of all eligible collateral desposited by Luxembourg counterparties is used via the CCBM (52.4%) and the links (30.3%), whereas domestic securities are used only marginally (17.3%). This can easily be explained considering the structure of the Luxembourg banking sector, which is predominantly composed of banks with and extensive international range of activities.

The CCBM, which used to be the only mean for channelling securities in the ESCB, is still heavily used by the market.

Since the beginning of 1999, the ESCB has assessed the use of unilateral and bilateral links between

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securities settlement systems. These links, approved by the Governing Council, allow for securities held in a securities settlement system in the ESCB member states, but issued in another of these states, to be used under certain conditions as collateral for ESCB credit operations.

### 4.6 The correspondent central banking model (CCBM)

The CCBM is a model established by the ESCB with the aim of enabling counterparties to use underlying assets in a cross-border context. In the CCBM, national central banks act as custodians for each other. This implies that each national central bank has a securities account in its securities administration for each of the other national central banks (and for the ECB). The model has been operational since the start of EMU. Experience acquired during the first two years of its functioning has shown that the CCBM encounters a great success with the counterparties. Actually, the value of securities in deposit has been steadily growing to reach 149 billion euro at the end of 2000. 17.4% of all eligible assets in the Eurosystem are held via the CCBM.

In 2000, the use of the CCBM has been very asymmetrical. The central banks most in demand as correspondents have been Italy (41%), Luxembourg (16%), Germany (14%) as well as Belgium (13%).



Among the biggest users of the CCBM appear the counterparties from Germany (38%), Great-Britain (15%), Luxembourg (12%) and the Netherlands (11%). The cross-border use of tier 2 assets remains marginal.



### 5 Banknotes and circulation of fiduciary money

### 5.1 Banknotes

The year 2000 was particularly active in the field of the euro notes production throughout the 12 EU member states which have adopted the single currency. The production for BCL is well on schedule.

The BCL has decided to open a test center for service providers and producers of note accepting machines. This center is planned to be operational in May 2001.

In October 2000, the BCL published the national changeover scenario after in depth consultation of all sectors implicated in the cash changeover to the euro in Luxembourg.

A great part of work was devoted to the preparation of the information campaign to be led by the BCL in 2001 to explain to the public the new currency and its introduction.

At the European level, the BCL took an active part in the committees and working groups of the Directorate Banknote of the European Central Bank and other international fora.

### 5.2 Monetary circulation in Luxembourg

In 2000, the global volume of national notes and coins decreased by 6.6%, coming down from LUF 5 billion to LUF 4.676 billion, due to the preference of the public for Belgian notes which have an easier international circulation.

### TABLE 3:

EVOLUTION OF THE VOLUME OF LUXEMBOURG NOTES

END OF PERIOD	5 000 LUF	1 000 LUF	100 LUF	LUF DENOMINATED BANKNOTES WITHDRAWN IN OTHER EURO AREA COUNTRIES	TOTAL
1996	3 298 065 000	1465 497 000	206 924 300		4 970 486 300
variation*	19.97%	22.97%	-4.95%		19.52%
1997	3 497 730 000	1 284 125 000	194 100 200		4 975 955 200
variation*	6.05%	-12.38%	-6.20%		0.11%
1998	3 194 890 000	1 090 562 000	185 821 900		4 471 273 900
variation*	-8.66%	-15.07%	-4.26%		-10.14%
1999	3 190 680 000	853 482 000	168 913 800	-159 980 000	4 053 095 800
variation*	-0.13%	-21.74%	-9.10%		-9.35%
2000	3 054 750 000	676 114 000	153 731 500	-168 910 000	3 715 685 500
variation*	-4.26%	-20.78%	-8.99%		-8.32%

\* variation against the previous year

The article 52 mechanism (exchange of in-currencies by euro zone national central banks) gives a partial insight of the circulation abroad of the Luxembourg Franc. In 2000, a total amount of 1.86 billion has been repatriated through the article 52 channel mostly from neighbouring countries. Figures on the repatriation through the privat sector are not known.

As to the circulation of LUF denominated coins, the volume remained unchanged (0.9 billion). Many demands coming from collectors and professional numismatists could not be encountered due to the fact that the competent authorities (Institut Monétaire Luxembourgeois until 1998 and afterwards the Treasury) did not mint new coins since 1991.

### 5.3 Management of the circulation

The monthly average of notes in circulation was 2.85 Luxembourg million francs. In 2000, the BCL cash department has treated 8.275 million notes for an amount of 18.873 billion francs. Approximately, 2 million new notes have been put into circulation in replacement of unfit notes.

In the framework of the article 52 mechanism, the BCL has treated 6.7 million notes of euro zone countries for a total amount of 313.5 million euro.

As an agent of the National Bank of Belgium for the handling of Belgian notes circulating in Luxembourg, the BCL cash department treated 41.78 million notes and destroyed 14.2% of them for being unfit for circulation.

Concerning coins, the BCL has put 25 million coins into circulation whereas 3.23 million coins have been returned to the Bank.

### 5.4 Numismatic issues

A silver coin (500 francs, sterling silver) has been issued to commemorate the accession to the throne of the Grand-Duke Henri. The coin was minted by the Royal Belgian Mint.

### 6 Financial stability

The globalisation of the financial markets has made significant progress over the last decade. This trend is being supported by technological improvements, the liberalisation of capital flows, deregulation and financial innovation. Although it presents beneficial effects for the economic development, it might at the same time be a source of risk. Excessive swings in the foreign exchange market, high volatility in the capital markets and the importance of international capital flows might lead to financial turbulences

with risks of international contagion as evidenced by the financial crises in the second half of the 1990's. Financial stability aims in a first instance at a harmonious functioning of the different components of the financial system and of their reciprocal relations; it has become a prime concern for the relevant national and international authorities, like the International Monetary Fund. The health and soundness of credit institutions plays a central role in this context.

Besides the main objective of price stability, central banks have, in accordance with the stipulations of the ESCB, an essential role in the functioning and stability of the financial system. A stable financial system is a necessary condition for a steady and adequate macroeconomic performance. Moreover, a stable financial system is essential for the conduct of monetary policy.

In this context, the responsibility of central banks lies mainly in the macroprudential supervision of the financial system and in the oversight of payment and securities settlement systems. A very close cooperation between central banks and supervisory authorities is indispensable in the case where the central bank is not in charge of the microprudential banking supervision. This necessity of enhanced cooperation is frequently mentioned at the European level, as in the report of the Economic and Financial Committee on financial stability (Brouwer Report) and in the position of the Governing Council. Luxembourg, within the Eurosystem, appears to be the country where the separation between the central bank and the supervisory authority is the most clear-cut.

### 6.1 Follow-up of the financial centre

The Bank has followed the major structural developments of the banking system as well as the activities and results of the financial sector from a systemic risk point of view. In that context, it has particularly focused on mergers and acquisitions within the banking industry, the development of the interbank market, the earning structure of banks, the evolution of interest margins, the results and the solvency of the banking sector. The Bank has analysed the developments in the fields of private banking and asset management. A study on the evolution of the interbank activity of the Luxembourg banking sector has been published in the Bulletin 2000/2 of the BCL. Finally, a permanent monitoring of the activities of the systemically important banks and important counterparties to the ECB's monetary policy operations has continued during the year 2000.

### 6.1.1 Mergers and acquisitions

Three kinds of mergers and acquisitions can be identified:

- National mergers and acquisitions in the banking sector.
- International mergers and acquisitions in the banking sector.
- National mergers and acquisitions with the creation of cross-sectoral financial conglomerates.

A feature of the Luxembourg banking sector is that a majority of banks are subsidiaries or branches of foreign groups. The consolidation activity of the Luxembourg financial centre therefore follows the process abroad, and this generally with a certain delay. Mergers and acquisitions affecting the financial sector are mostly operations initiated by mergers and acquisitions of parent companies abroad. The credit institutions involved accounted for 14% of the aggregated balance sheet of the financial centre at the end of the year 2000.

Within the European Union, the majority of mergers and acquisitions have taken place between banks of the same country (about 80%), and more precisely, between small institutions. However, the importance of assets involved in mergers and acquisitions tends to increase, which indicates the implication of larger banks. Most of the international mergers and acquisitions involved banks outside the European Union, and were motivated by the search for profits in emerging markets. For certain banking activities the appropriate market is the global rather than the European market (for example asset management). Mergers and acquisitions between European institutions have generally aimed to create regional groups, particularly within the Benelux or the Nordic countries, as shown by Fortis, Dexia and MeritaNordbanken.

The consolidation of the Luxembourg financial sector also takes place among asset management companies and other financial institutions (for example in the sector of the administration of investment funds). At the European level a process towards the creation of financial conglomerates (i.e.

financial groups operating in different sectors of the financial industry) has taken place. Indeed, credit institutions have mainly expanded their activities in the fields of "Investment management" and "Asset management", mostly by the creation of new companies. The development of financial conglomerates combining banking and insurance activities is observed in a majority of member states. Luxembourg seems to be characterised mainly by cooperation agreements in this context.

At the European level, and particularly in the large EU member states, an increase in the degree of market concentration linked to mergers and acquisitions is apparent. A certain relation between the size of a country, the degree of concentration, and the extent of merger and acquisition activities seems to exist. Indeed, small member states tend to have a higher level of concentration (with the exception of Ireland and Luxembourg due to the presence of a large number of foreign banks). In Luxembourg, the five biggest banks hold, in September 2000 figures, 26% of total assets of the domestic banking sector (compared to 21% in 1995), 23.8% of total deposits and 23.7% of total credits (compared to 22.7% for both ratios in 1998). A tendency towards more concentration of financial activities in the Luxembourg banking sector is discernible. However, its level remains markedly below the EU average.

The number of credit institutions has decreased, in different extents, in all member states with the exception of Ireland and Greece. In Luxembourg the number of credit institutions diminished from 220 in 1995 to 202 at the end of 2000. The number of foreign branches fell from 68 in 1995 to 63 at the end of the year 2000. On the other hand, the number of employees in the banking sector increased from 18 255 in 1995 to 23 035 at the end of 2000; their share in overall national employment progressed from 8.5% to 8.6%.

Mergers and acquisitions between small banks generally aim to eliminate excess capacities and to reach a critical size that will ensure its survival. On the other hand, mergers and acquisitions between large banks are motivated not only by the desire to realise economies of scale, but also to achieve a strategic repositioning in the market.

The analysis of mergers and acquisitions at the European level shows a tendency to create a rather complex structure in a first stage, which would afterwards be restructured and simplified. It is difficult to anticipate the final result of the consolidation process. A bigger size certainly permits a reduction in fixed costs, an increase in the range of products offered, a change in the competition conditions and a more international presence; it has therefore a positive impact on financial stability. However, it is difficult to define the optimal size of a credit institution; new challenges may arise, particularly in the running of the bank and in the field of risk management. What is more, a reduced competition level on financial markets following the consolidation process might lead to less efficient credit institutions and slower transmission of the monetary policy.

### 6.1.2 Balance sheets of banks

The balance sheet total of the Luxembourg banking sector increased by 8.3% in 2000 after growing by 10.6% in 1999. On the assets side, loans and advances to credit institutions were the most important category with 48.1% of the consolidated balance sheet. Loans and advances to customers represented 20.3% of total assets. An important increase has taken place in the portfolio of bills and securities: its share climbed from 18.9% in 1995 to 26.3% at the end of 2000. On the liabilities side, the amounts owed to credit institutions dominated the consolidated balance sheet with 47% while the amounts owed to customers accounted for 34.2%.

The pace of growth in credits allocated by the Luxembourg banks accelerated significantly during the year 2000. Credit volume expanded by 8.9% after an increase of 5.5% in 1999. This phenomenon can be mainly attributed to the increase of credit towards counterparts of Monetary Union member states. This grew by 15.2% in 2000, a sign of the gradual integration of the European financial market.

The stock of shares held by Luxembourg banks increased by 22.2% in 2000, after 46.2% in 1999<sup>1</sup>. The growth in its value is mainly due to stock market gains. For Luxembourg banks the importance of shares in total assets remains insignificant. They accounted for 0.9% of total assets at the end of 2000, compared to 3.7% in the euro area. The movements in share prices should therefore have only marginal effects on the financial results of the banks.

<sup>&</sup>lt;sup>1</sup> Comparison of end-of-year data

Capital and reserves amounted to 17 172 million euro at end 2000, an increase of 14% compared with the previous year. The global solvency ratio decreased from 1.71 at the start of the year 2000 to 1.67 at year's end, but remained well above the threshold of 1.

Given the relevance of interbank activity in Luxembourg, the Banque centrale du Luxembourg realised in the year 2000 a study on the development of the Luxembourg interbank market. Indeed, since 1994, this activity had been continuously progressing and had reached 49% on the assets side and 42% on the liabilities side of the consolidated balance sheet of the domestic financial sector at the end 2000. The geographical distribution of interbank flows shows that, at the end of 2000, the main foreign recipient countries are Germany, followed by France, Italy, the United Kingdom and Switzerland while the main foreign countries of origin are, in decreasing order, Switzerland, Germany, the United Kingdom, France and Italy. Luxembourg is a net importer of interbank funds from Switzerland and it is a net exporter of funds to Germany, Italy and France. Interbank claims towards the main high risk countries<sup>2</sup> represented only 0.9% of all interbank claims of the domestic financial sector at the end of 2000, which limits the exposure to geographical risk.

The distribution by maturity of interbank claims and engagements showed an important concentration (51% on the assets side and 62% on the liabilities side) towards the short term maturity up to one month. On the assets side, the predominance of short term maturities tends to reduce credit risk. On the liabilities side however, the importance of short term funds increases liquidity risk; moreover, the risk is amplified by a mismatch of short term maturities in favour of the liabilities side.<sup>3</sup>

### 6.1.3 Income and performance

The banking system faces a certain number of developments like the increase in competition, the concentration of the sector, and the phenomena of reorganisation and disintermediation. These developments influence the level and the structure of a bank's income.

The share of non interest income in total income has significantly increased for the Luxembourg banks during the past decade. It climbed from 35% in 1995 to 54% at the end of 2000. As in most European countries, commissions income is the most important part of non interest income (74.3% at the end of 2000 for Luxembourg).

Non interest income seems to be slightly more volatile than net interest income. The increasing activity of banks in operations generating non interest income might thus influence their risk profile.

The overall interest margin<sup>4</sup> of Luxembourg credit institutions decreased from 2.87% in 1998 to 2.19% during the year 2000<sup>5</sup>. It follows the trend at the European level in this context. It seems that intensified competition, due to deregulation and new telecommunication technologies, observed in Luxembourg as well as in the other countries of the European Union, is the main reason behind this trend. Unlike other countries, Luxembourg does not seem to be affected by a noteworthy increase in competitive pressure emanating from new entries into the banking sector.

Compared to previous year data, the net income of Luxembourg banks increased by 29% in 2000. The return on equity amounted to 13.1%, well above the European average. The return on assets, at 0.4% in 2000, showed a slight increase compared to 1999, but remained superior to the European average. Net provisions represented 4% of own funds in 2000, unchanged in regard to 1999. As for the costs, the Luxembourg banks managed to maintain a low " operational costs to total income" ratio at 45% in 2000. In 1999, this ratio was at 46%, 22 percentage points below the average of the euro zone and 19 percentage points lower than the European Union average.

### 6.1.4 Wealth management

Two types of partially related activities can be distinguished in the field of wealth management: Asset Management and Private Banking. Investment funds constitute an important vehicle for the banks in their management of assets. These funds are either intended for institutional investors like pension funds, insurance companies and funds created for very rich individuals or for the general public.

<sup>&</sup>lt;sup>2</sup> 48 high risk countries outside the OECD as defined by CSSF circular 2000/23

<sup>&</sup>lt;sup>3</sup> Credit risk, replacement risk and liquidity risk make up the counterpart risk

<sup>&</sup>lt;sup>4</sup> It roughly corresponds to the difference between lending and deposit margins

<sup>&</sup>lt;sup>5</sup> Third quarter 2000 figure

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The number of Luxembourg undertakings for collective investments (UCIs) has expanded from 805 to 1785 during the past decade. The net asset value of all UCIs has increased twelve times in the same period. The breakdown of UCIs shows that 1632 UCIs are destined to the general public and 153 UCIs are intended for institutional investors. The latter have known a stronger expansion in recent years; their relative importance increased from 3% of all UCIs in 1996 to 9% at the end of 2000.

The European investment fund industry for the general public enjoyed significant expansion in the 1990's too. The net asset value increased 14 times since 1990 (the increase is partially due to capital gains associated with stock market gains). The banks have played an important part in these developments, in particular through their distribution channels. Investment funds for institutional investors also tend to grow in Europe. This expansion mainly reflects the development of private pension funds.

Although the activity of asset management is perceived by the banks as more profitable than traditional banking, the competition is growing and the barriers to entry tend to diminish with the development of the internet. The latter tends to lower entry and exit costs as well as commissions.

While credit risk in this kind of activity is assumed by customers, banks are still exposed to operational risk, reputational risk and specific external risks in this context.

### 6.1.5 Contribution to the legislation

The Banque centrale du Luxembourg has contributed to the official opinions of the European Central Bank. It has also been consulted by the Luxembourg authorities on a certain number of legislative bills, owing to its responsibilities in the fields of financial stability and oversight of payment and securities settlement systems.

Among the different bills the Bank has taken position on during the year 2000, the ones which transposed the EC Directive 98/26 concerning settlement finality in payment and securities settlement systems and the one on the movement of securities and other financial instruments should be cited particularly.

As regards the last bill, the legislator has not taken into account criticisms formulated by the Eurosystem in respect of the disposition authorising the inscription of securities into accounts prior to their final delivery on the basis of an irrevocable engagement by a professional financial intermediary of a OECD member state.

### 6.2 Oversight of the payment and securities settlement systems

The Bank has started its works in the field of the oversight of payment and securities settlement systems. The central banks of the ESCB have an inherent competence in this context. This has been reminded during discussions on the transposition of the European directive on settlement finality which has led to a recently enacted Luxembourg law.

In accordance with this law, the BCL has notified the payment and securities settlement systems in which the Bank participates to the European Commission; these systems are now approved and protected by the clauses of the directive. The Bank has the responsibility to assure the oversight of the systems on the basis of rules defined by the Eurosystem.

To that end, the Bank has started its oversight mission. A circular on the oversight of payment and securities settlement systems by the Bank has been published on 23 February 2001 and policy papers are being elaborated in this context.

A Memorandum of Understanding relating to the cooperation in the field of the oversight of payment systems has been adopted by the Governing Council of the ECB. It will be signed by the central bank governors in their competence as overseers of these systems and the banking supervisory authorities. The Memorandum precisely defines the modalities of cooperation and it comprises in particular the exchange of information between the concerned parties. Besides, it intends to lay out the foundation for a more thorough collaboration between central banks and supervisory authorities in general. The BCL has suggested to create a global platform of cooperation with the Commission de surveillance du secteur financier (CSSF), based on the clauses of the statutes of the two institutions providing for the exchange of information between the two parties.

### 6.3 Contribution to the prudential supervision

The ECB has stated the essential role of the euro area NCBs in the field of prudential supervision. The Governing Council deems appropriate, following the introduction of the euro, to couple the competence of the Eurosystem in the field of monetary policy with substantial responsibilities of the NCBs in the supervision of domestic markets and a more pronounced cooperation with domestic supervisory authorities. The attribution of supervisory responsibilities to the NCBs, covering the microprudential as well as the macroprudential area, is beneficial.

In Luxembourg, no institutional relations or official agreements governing the bilateral cooperation between the BCL and the supervision authority have yet been established.

### 6.4 External assistance

The Bank has provided its expertise in the field of banking supervision during a mission of the Arab Monetary Fund. It was mandated to proceed to an evaluation of the banking supervision system of a member state of the Fund and to make reform proposals.

### Conclusion

The current general situation of the banking sector is judged rather favourable and the potential for imminent systemic risks seems to be rather limited. The introduction of the euro has allowed the banks, which have become monetary policy counterparts of the Bank since 1 January 1999, to substantially increase their operations with the Eurosystem. The introduction of the euro has also contributed to the development of the main activities of the financial centre, including asset management and private banking, which should further benefit from the progress, certainly too slow, of the financial integration of the euro zone. The contribution of stock exchanges remains mainly domestic. The arrival of a deeper, more liquid and diversified European financial market, paired up with technological progress, the phenomenon of disintermediation, more intense competition, a redirection towards off balance sheet activities and increasing pressure to create value for shareholders represent both opportunities and challenges for the stability of the system.

The BCL will reinforce its activities in the field of surveillance by the creation of a system of macroprudential indicators. This system will allow the monitoring of the stability of the Luxembourg financial sector on a continuous basis and will be complemented by specific studies.

### 7 Communication activities of the BCL

The objectives of the BCL's communication strategy are:

- to contribute to the Eurosystem's communication policy and to disseminate the ECB's information material and documents;
- to enhance public understanding of its competencies by own activities and publications.

The BCL is the relay of the Eurosystem in Luxembourg. It ensures the dissemination of ECB information material and documents free of charge to different target groups. The BCL contributes to the ECB Annual Report. This report as well as the ECB Monthly Bulletin are distributed to interested groups and to the general public. Staff economic projections are published in the ECB Monthly Bulletin since December 1999 on a bi-annual basis. Two information brochures have been distributed to the general public in 2000: «The monetary policy in stage III : General documentation on Eurosystem monetary policy instruments and procedures» and «The European Central Bank». The latter presents some aspects of the euro and of the tasks of the Eurosystem, the objective of price stability, the ECB's independence and transparency, the monetary policy strategy and instruments. Many ECB publications are available in the official languages of the EU on the ECB's website www.ecb.int, which provides links to the websites of all European NCBs, the BCL included.

The new working papers series of the BCL, published from 2001 onwards, seeks to disseminate the results of research conducted within the BCL. The working papers are published in the name of the authors (N°1: «An assessment of the national labour market on employment, unemployment and their link to the price level in Luxembourg»).

The BCL's website shows on average 180 000 hits (number of pages consulted) and 6 500 visitors a month. The graphic layout and the structure of the website will be updated in 2001 to reflect the corporate image of the Bank.

The *Euro 2002 Information Campaign* organised jointly by the ECB and the NCBs of the euro zone has 2 main objectives:

a) to provide information on:

- Appearance of the banknotes and coins, including their colours and dimensions;
- Security features, which will enable the public to recognise genuine banknotes and coins (these features will be unveiled in September 2001);
- Denominations;
- Cash-changeover modalities in Luxembourg.

b) the training of the "cash-handlers" (cashiers, police staff, security agents,...).

The partnership programme has been made public at the headquarters of the BCL on 30 January 2001.

Since 4 January 2001, the BCL conducts the national part of the information campaign on the euro. The campaign is coordinated by the ECB, but executed by the NCBs.

In parallel with the planned actions of the Eurosystem, the BCL has set up its own communication activities.

a) €-clock

The  $\in$ -clock, which was inaugurated on 4 January 2001, is a digital notice board that shows the countdown to the  $\notin$ -day.

- b) The brochure "Introducing euro banknotes and coins in the Grand-Duchy of Luxembourg" published in October 2000.
- c) €uro-news

Since 1 February 2001, the BCL maintains a regular presence in the national media by publishing press articles titled "Den Euro-eis Suen" and broadcasting TV and radio spots.

d) Fairs

To make personal contact with the public, the BCL will be present on all major fairs organised in Luxembourg during 2001, the student's fair included.

e) Exhibitions

At the end of 2001 and during the first months of 2002, the BCL will organise euro road-shows in the largest shopping centres of Luxembourg to increase once more the public's awareness of the new currency.

f) Euro 2002 Information Campaign Conference

Like in all the other countries of the eurozone, the BCL has convened the main national actors of the cash-changeover process for a one day conference on the euro.

g) Infoline

A free-of-charge infoline (number 8002 0101) has been set up to provide answers to the public's requests on the euro banknotes and coins and their introduction in Luxembourg.

h) Website www.bcl.lu

The BCL website offers updated information on the introduction of euro banknotes and coins in Luxembourg as well on the national cash-changeover scenario.

i) Website www.euro.ecb.int

This multilingual website of the Eurosystem was launched in January 2001, and offers updated information on euro banknotes and coins.

### 8 The organisation of the BCL

### 8.1 The Council of the BCL

In 2000, the composition of the BCL Council was the following one:

President: Yves Mersch Members: Andrée Billon Jean Hamilius Mathias Hinterscheid Serge Kolb

> Patrice Pieretti Nico Reyland Pierre Werner

Michel Wurth

On 12 October, Mr Pierre Werner resigned for health reasons from his mandate. The Council paid tribute to Mr Werner's unfailing endeavour in the interests of the Bank.

In 5 meetings in 2000, the Council followed closely the patrimonial evolution of the BCL. Regular discussions took place on the economic and financial situation in Luxembourg, Europe and the world as well as on the decisions of the Governing Council of the European Central Bank.

The Council was kept informed of the ongoing preparatory work for the cash-changeover operations. Meetings took place with the external and the internal auditors. The evolution and the situation of the Bank's staff was a point of concern for the Council.

The Council was constantly informed on the progress of the building "site Nouveau Royal" and agreed unanimously to the proposal of the management to give to this building the name "Bâtiment Pierre Werner" in commemoration of Mr Werner's outstanding personality in the political, financial and monetary field in Luxembourg as well as in Europe.

### 8.2 Used means

### 8.2.1 Evolution of the staff

During the year 2000, the staff of the BCL has increased by 6.58% to reach a total of 162 agents at 31 December 2000; this is equivalent to 158 full time posts.

The BCL received almost 500 spontaneous job applications, a hundred responses to various advertisements of job vacancies and around 120 applications for internship. The average age of the BCL staff has slightly increased from 34.33 to 35.14 years of age. The BCL is composed of 29% female and 71% male agents.

### 8.2.2 The pension fund of the BCL

During the year 2000, the Bank has taken important steps in the establishment of its pension fund, as provided for by its statutes of 23 December 1998.

### 8.2.3 The buildings

The new "Bâtiment Pierre Werner" has been put into use. In particular, the IT and technical installations are housed in this building.

The official inauguration ceremony of the BCL was held on 18 May 2001.

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### 8.2.4 The IT infrastructure

The year 2000 has been marked by the preparation of the new IT infrastructure at the headquarters and the move of the IT infrastructure to the Bank's new premises. The IT staff moved as well. Following these changes, the network now links the two main buildings at the headquarters and the disaster standby site at Munsbach.

The disaster standby site has been equipped with additional, less critical systems. Extensive testing with various switch-over scenarios has already started.

Intrusion tests, carried out by a specialised company, proved the high security level achieved.

The separation with the IT infrastructure of the Commission de surveillance du secteur financier (CSSF) has been almost completed during 2000. A mutual backup system for common data sent by banks and investment funds is under way.

In the area of payment systems, the availability of the TARGET system could be raised to 99.64% on a yearly basis. The BCL became a member of the LIPS-Net netting system.

Regarding the other applications, the following projects have been started or concluded :

- A project allowing banks to dispose of overnight liquidities, has been initiated.
- An archive application has been brought into production.
- The Balance of Payments application has been launched and will enter its pre-production phase in autumn 2001.
- A new statistical application is under way.
- A new package allows to handle the circulation of euro banknotes and coins.
- Other projects have been initiated together with the other national central banks, which are members of the ESCB, such as a counterfeit monitoring system.

### 9 Annual accounts

9.1 Key figures at the end of the financial year

### KEY FIGURES AT THE END OF THE FINANCIAL YEAR

	1999	2000	Variation in %
	EUR	EUR	2000/1999
Balance sheet total	11 210 976 005	20 986 264 254	87%
Banks deposits	4 182 725 909	4 911 694 804	17%
Claims on banks	9 096 577 247	19 325 913 603	112%
Own funds (1), revaluation accounts			
and provisions for specific banking risks	218 845 318	264 601 880	21%
Operating profit on banking activities (2)	18 785 603	35 206 775	87%
Administrative expenses	13 841 183	16 552 939	20%
Profit of the year	895 419	3 066 462	242%
Cash-flow (3)	13 849 638	41 442 047	199%
Proportion of the BCL in the ECB capital	0.1492%	0.1492%	
Proportion of the BCL in monetary policy operations conducted by the Eurosystem	3.599%	7.177%	

<sup>&</sup>lt;sup>(1)</sup> Capital, reserves, provision for general risks and profit for the year transfered to reserves

<sup>&</sup>lt;sup>(2)</sup> Net result on interest, commissions and financial operations

 $<sup>^{\</sup>scriptscriptstyle (3)}$  Profit for the year plus value adjustment (net) and provisions for banking risks (net)

### 9.2 Balance sheet as at 31 December 2000

The year 2000 is the second time the presentation of the BCL's annual accounts is based on the harmonised model of the Eurosystem and set up according to the standardised rules of the mentioned model.

The balance sheet total grew from 0.4 billion euro in 1997 (for the IML), to 0.5 billion euro in 1998 (BCL), 11.2 billion euro in 1999 and finally to 21 billion euro in the year 2000. This means a 87 % increase since 1999. The main part of this rise is due to the sum of the claims on banks (19.3 billion euro), i.e. 92.5 % of the total assets.

The introduction of the auction procedure regarding the main refinancing operations at variable rates has increased the activity volume, since the national banks carried out high offers at competitive rates.

The average amount of minimum reserves to be observed on a monthly basis was 7.2 billion euro (at 31 December 6.3 billion euro). The difference between banks deposits and claims on banks can mainly be traced in the liabilities towards the Eurosystem in the TARGET frame.

Concerning the off balance sheet items, the item «Custody deposits» (57.9 billion euro in 2000 against 45.9 billion euro in 1999), which represents the banks securities deposits in order to cover their commitments connected to the monetary policy operations, shows a notable increase.

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### BALANCE SHEET AS AT 31 DECEMBER 2000 (in euro)

	2000	1999
ASSETS	EUR	EUR
Gold an gold receivables	22 373 880	22 107 235
Claims on non-euro area residents denominated		
in foreign currency	82 320 948	76 995 897
- receivables from the IMF	82 163 186	76 665 397
<ul> <li>balances with banks and security investments,</li> </ul>	5	,,
external loans and external assets	157 762	330 500
Claims on non-euro area residents denominated in euro	262 634	720 591 718
<ul> <li>balances with banks, security investments and loans</li> </ul>	262 634	720 591 718
Lending to euro area credit institutions related to monetary		
policy operations denominated in euro	19 281 561 908	9 000 293 956
- main refinancing operations	17 316 665 300	4 841 044 700
<ul> <li>longer-term refinancing operations</li> </ul>	1 964 896 608	3 431 930 000
<ul> <li>marginal lending facility</li> </ul>	-	727 319 256
Other claims on euro area credit institutions		
denominated in euro	44 351 695	96 283 291
Securities of euro area residents denominated in euro	198 102 637	199 357 376
Intra-Eurosystem claims	82 060 000	82 060 000
<ul> <li>Participating insterest in ECB capital</li> </ul>	7 460 000	7 460 000
<ul> <li>Claims equivalent to the transfer of foreign</li> </ul>		
currency reserves	74 600 000	74 600 000
Items in course of settlement	90 025	41 207
Other assets	1 257 140 527	1 013 245 325
<ul> <li>Tangible and intangible fixed assets</li> </ul>	54 490 631	40 715 883
- Other financial assets	561 318 843	431 498 909
<ul> <li>Off-balance sheet instruments revaluation differences</li> </ul>	55 860 341	33 374 219
- Sundry	585 470 712	507 656 314
TOTAL ASSETS	20 968 264 254	11 210 976 005

# BALANCE SHEET AS AT 31 DECEMBER 2000 (in euro) (continued)

	2000	1999
	EUR	EUF
LIABILITIES		
Banknotes in circulation	660 719 842	585 273 703
Liabilities to euro area credit institutions related to		
monetary policy operations denominated in euro	4 911 694 804	4 182 725 909
- current accounts (covering the minimum reserve system)	4 911 694 804	4 182 725 909
Liabilities to other euro area residents denominated in euro	584 765 367	503 379 72
- General government	569 212 620	485 348 590
- Other liabilities	15 552 747	18 031 131
Liabilities to non-euro area residents denominated in euro	51 294 798	2 161 594 876
Counterpart of special drawing rights allocated by the IMF	23 738 441	23 143 168
Intra-Eurosystem liabilities - Liabilities related to TARGET	14 361 449 504	3 452 134 101
<ul><li>and correspondent accounts (net)</li><li>Liabilities related to other operational requirements</li></ul>	14 360 466 095	3 451 282 540
within the Eurosystem	983 409	851 561
Items in course of settlement	16 836 853	22 830 910
Other liabilities	84 209 223	51 202 515
<ul> <li>Off-balance sheet instruments revaluation differences</li> </ul>	675 065	
<ul> <li>Accruals and deferred income</li> </ul>	64 476 444	25 605 495
- Sundry	19 057 714	25 597 020
Provisions	91 551 449	55 626 286
Revaluation accounts	18 996 660	13 123 965
Capital and reserves	159 940 851	159 045 432
- Capital	25 000 000	25 000 000
- Reserves	137 890 363	137 890 363
- Retained earnings	(2 949 512)	(3 844 931)
Profit for the year	3 066 462	895 419
	20.0/0.2/4.254	11 010 07/ 005

TOTAL LIABILITIES

20 968 264 254

11 210 976 005

### OFF-BALANCE SHEET AS AT 31 DECEMBER 2000 (in euro)

	2000	1999	
	EUR	EUR	
Custody deposits	57 911 702 463	45 910 350 083	
Contingent liabilities	-	11 805 633	
Foreign currency reserves assets administrated			
on behalf of the ECB	82 433 757	89 246 727	
Forward transactions	68 038 525	-	
Numismatic collection	107 972	107 972	
TOTAL	58 062 282 717	46 011 51 415	

### PROFIT AND LOSS ACCOUNT FOR THE FINANCIAL YEAR 2000 (in euro)

	2000	1999
	EUR	EUR
Interest income	662 448 686	310 435 135
Interest expenses	(625 538 468)	(283 541 612)
Net interest income	36 910 218	26 893 523
Realised gains / (losses) arising from financial operations	(714 097)	(27 542)
Write-downs on financial assets and positions	(976 081)	(9 510 780)
Transfer to provisions for foreign exchange rate and price risks	(35 530 837)	(9 835 941)
Net result of financial operations, write-downs and risk provisions	(37 221 015)	(19 374 263)
Fees and commissions income	3 335 941	2 550 958
Fees and commissions expenses	(3 349 206)	(1 120 556)
Net result from fees and commissions	(13 265)	1 430 402
Net result of pooling of monetary income	(983 556)	(1 266 915)
Other income	25 323 956	11 223 944
Total net income	24 016 338	18 906 691
Staff costs	(10 434 251)	(8 359 963)
Other administrative expenses	(5 386 182)	(5 154 581)
Depreciation of tangible and intangible fixed assets	(3 110 369)	(2 178 514)
Banknote production services Other expenses	(523 906) (1 495 168)	(163 804) (2 154 410)
PROFIT FOR THE YEAR	3 066 462	895 419

The accounts of the year 2000 release a profit of 3.1 million euro against 0.9 million euro in 1999. The profit of the BCL shows a substantial increase. The interest income increases by 37%. The increase of the expenses is especially moderate with regard to the development of the activities.

# PART Ι

ANNUAL REPORT 2000 SUMMARY

### BANQUE CENTRALE DU LUXEMBOURG ANNUAL REPORT 2000

# THE ECONOMIC SITUATION IN LUXEMBOURG

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PART

### Inflation

1

The national index of consumer prices (NICP) in Luxembourg has increased on average by 3.2% in 2000. According to the same measure, the average annual inflation rate in 1999 was 1.0%. This acceleration of inflation can mainly be attributed to international factors: the rise in the price of petroleum products over most of 2000 and the depreciation of the euro vis-à-vis international currencies. The price of petroleum products increased by 30.5% on average during the year 2000.

However, the two factors mentioned above do not entirely explain the inflation development in 2000. In fact, a similar acceleration characterised the underlying inflation rate, which tracks economic processes more closely by excluding goods whose prices are more volatile.

The increase in inflation since 1999 has been greater in Luxembourg than in other countries in the euro zone. In the past, Luxembourg's inflation generally tended to be below the euro zone average. However, since the second quarter of 1999 Luxembourg's inflation rate has been above the average euro zone inflation rate. As measured by the harmonised index of consumer prices (HICP) used for international comparisons, Luxembourg's inflation was on average 2.3% in 2000, 1.5% above that of the euro zone. In the year 2000, only Ireland, with a 5.3% annual average, experienced a higher inflation rate than Luxembourg\*.



The year 2001 began with an increase in the statutory minimum wage in January and an automatic wage indexation on 1 April which should both accentuate the upwards pressures on prices. HICP inflation, excluding energy and unprocessed food, is expected to pass from 2.0% in 2000 to 2.6% in 2001 (it was only 1.0% in 1999). Luxembourg's HICP inflation should drop below the euro zone average during the first quarter of 2001. This reflects the greater weight of the energy component in the Luxembourg index and its higher sensitivity to oil prices. In contrast, underlying inflation will remain above that of the euro zone throughout the year 2001.

The next automatic wage indexation is expected in mid 2002. However, the exact date is difficult to forecast due to uncertainty on the international market for petroleum products. Automatic wage indexation

<sup>\*</sup>See also 'L'accélération de l'inflation au Luxembourg', published by the BCL in the Bulletin 2000/1.

**REAL GROWTH OF GDP AND ITS COMPONENTS (IN %)** 

may occur earlier or later, depending on how favourable petrol price developments will be relative to our working hypothesis.

### 2 Economic Growth

Benefiting from a favourable international climate, economic growth in Luxembourg has been exceptionally strong. Growth of real gross domestic product (GDP) was around 8.5% in 2000. This represents the fourth consecutive year of strong economic growth. In 1999, real growth was 7.5%. Cumulative GDP growth since end 1997 has been nearly 22.5%. Economic growth in the year 2001 is also expected to be strong.

Private consumption expenditure, the most important component of GDP, increased by 3.5%. This is slightly lower than in the previous year (+4.1%). For private consumption, as for the other components of domestic demand (public consumption and investment), it is important to note that it partly represents imported goods and services.

Final consumption expenditure of the public sector has increased strongly (+4.9%). The increase was particularly high in 1999 (+12.8%) due to the introduction of long-term care insurance, supplementary family support, and increases in expenditures for social insurance and pension funds. In 2000, the expenditures for public consumption increased partly through the wage agreement in the public sector. Expenditures for long-term care insurance are also likely to have contributed to this increase.

Investment expenditure has been nearly unchanged compared to the previous year. After an exceptional growth rate in 1999 (+26.7%), this still represents a high level of investment expenditures. The services sector, including banking, transport and telecommunications should once more contribute to a growth rate above the European average.



Source: STATEC

GRAPH 12:

Export growth has increased from 7.9% in 1999 to 14.3% in 2000, while import growth has dropped from 11.2% to 10.3%.

Economic activity in industry slowed down in the third quarter of 2000 and stabilised thereafter. Despite the observed slowdown at the end of 2000, company executives are optimistic about the year 2001.

The other market services sector (including financial intermediation, real estate, renting and business

activities, transport and communications) has once again been the engine of growth in the Luxembourg economy in 2000. Its contribution to economic growth surpasses by far the contributions of industry, construction and wholesale and retail trade.

The outlook for 2001 remains generally positive in all sectors. The services sector, including banking, transport and telecommunications should once again contribute to a growth rate above the European average.



### 3 Labour market

The official unemployment rate is on average 2.6% in 2000, compared to 2.9% in 1999. The number of registered unemployed has declined by 387 persons on average (-7.2%).

The labour market remains very vigorous. In 2000, 14 000 new jobs were created, which marks an increase of 5.5%. This constitutes the third consecutive year of record growth, highly exceeding the average annual long-term increase, which is 3.3% for the period 1985-2000. The average level of total employment observed in 2000 represents an increase of 15.7% compared to the year 1997. During the same period, the number of employees has increased by 16.8%. While the resident population has grown by 16.3% between 1990 and 2000 (1.5% p.a.), total employment has grown by 39% (3.4% p.a.). In 2001, employment growth should once more reach a level well above the long-term average (+3.3%). It is open to question how long this growth rate can be sustained.

The inflow of non-residents has continued to account for the largest part of employment growth. Cross-border commuters represent nearly 64% of newly created jobs. This share is practically unchanged compared to last year's figure. In 2000, the share of cross-border commuters reached one third of total domestic employment (33.3% annual average). This represents an increase of 11.5% in terms of

PART



individuals. Among the cross-border commuters, 53% come from France, 28% from Belgium and 19% from Germany.

There has been a noticeable increase in the employment rate of married women. Among males, the participation rate of young people (aged 15-24) as well as older people (aged 55-65) is in decline. The participation rate of married men is higher than that of single men (84.1% versus 61.4%).

Wages and social benefits have been increased automatically by 2.5% in July 2000. The previous indexation occurred only 11 months ago.

### 4 The financial sector in Luxembourg

### 4.1 Monetary financial institutions

On 31 December 2000, the Luxembourg financial centre included 647 monetary financial institutions reporting to the Banque centrale du Luxembourg, which is a net reduction of two units compared to the number at the end of 1999.

The number of money market investment funds has increased by 6. During the year 2000, the total balance of Luxembourg's monetary financial institutions (excluding the Banque centrale du Luxembourg) has increased markedly to reach 705 920 million euro on 31 December 2000. This is an increase of 8.8% compared to the level on 31 December 1999. At the end of the year 2000, the Luxembourg monetary financial institutions accounted for 4.2% of the total balance of the monetary financial institutions in the euro zone.

### 4.2 Credit institutions

Increasing concentration in the banking sector marked the year 2000. The number of credit institutions declined from 210 to 202 institutions by end December 2000. Among these institutions, 139 were subject to Luxembourg law and the remaining 63 were institutions subject to foreign law.

### 4.2.1 Balance sheet

In the year 2000 the Luxembourg banking sector has confirmed its vigour and its importance for national economic growth. Benefiting from a favourable economic climate in Europe and the rest of the world, all activities (loans to enterprises, mortgage credits, bonds, share portfolios...) have seen spectacular increases in 2000.

The aggregate balance sheet of credit institutions has reached 647 899 million euros on 31 December 2000, which is an increase of 8.3% compared to 31 December 1999 (+10.7% average over the year). Thus the rate of growth has risen considerably compared to 1999 (+3.2% average over the year). This is primarily due to the growth in the first three-quarters of 2000, which reported an increase of 12.4%, while the increase in the last quarter was only 8.1%. The slowdown towards the end of 2000 partly reflects developments in the United States, and to a lesser extent, developments in other member states of the euro zone, and partly the decline in international financial markets, in particular in the technology sector.

Beyond the developments observed during the last quarter, the main impression is that of a banking economy in full expansion as confirmed by a double-digit growth rate on average. The rapid growth in banking output is the combined result of several positive factors: a favourable economic climate in Europe and elsewhere supporting the expansion of credit activities but also favouring market activities. These facts are consolidated by appropriate monetary policies with respect to inflationary tendencies in the U.S. and in Europe.

### 4.2.2 Structure and components of aggregated balance sheets

On the asset side, increased banking activity can be explained on the one hand by the increase in securities business, reflecting increased portfolio values (+49.5% in shares and 9.6% in bonds), and on the other hand by increases in loans and advances to customers and in financial leasing (+15%). On the liability side, the corresponding changes are an increase is in customer accounts (+13.3%) and especially a strong increase in debt securities in issue (+17%) and in deposits from banks (+7.1%).

### Bank profits reached new heights in 2000

Luxembourg banks have shown a marked increase in their level of activity, as was mentioned previously. This positive development translates into a new peak in profits. The expansion of market operations, funds business, and the dynamism of international activity sustain the increase in banks' profitability, in particular in private banking.

### Moderate increases in operating charges bolster banks' profits

On the whole, overhead costs (personnel, administrative costs and depreciation of tangible assets) increased by 15.8%, which represents more than in 1999 (+4.2%). Staff costs increased by nearly 13%, which is less than other operating costs (+20.9%). Staff costs represent 48.6% of overhead costs (against 49.8% in 1999). The share of depreciation in overhead costs declined from 9.6% in 1999 to 9% in 2000. Overall, the moderate increase of operating costs relative to earnings growth allows earnings before provisions to reach more than 4.32 million euro, which reflects an increase of 20.2%. Due to this performance, earnings before provisions per employee has clearly improved, rising from 268 000 euro to 294 000 euro (+9.7%).

### 4.3 Employment in the financial sector

During the year 2000, employment in the financial sector has continued to increase rapidly. The intake by credit institutions and other financial professionals has increased by 2 554 units during the year, which represents an increase of 10.6% relative to 31 December 1999. On 31 December 2000, employment in the financial sector reached 26 539 individuals, which represents an increase of 767 individuals (+3%) relative to 30 September 2000. Using the latest data on the total employment in Luxembourg, one can state that employment in the financial sector now represents 10% of total employment in Luxembourg. On 31 December 1999 this figure was 9.5%.

### 4.4 Investment funds

During 2000, the Luxembourg industry of investment funds was in good health despite considerable turbulence on international financial markets.

The favourable development in investment funds during the preceding year is not only reflected in the net worth under management, but also in terms of the number of funds. On 31 December 2000, the number of investment funds was 1 785, which is an increase of 155 relative to 31 December 1999. The number of fund compartments also increased by 1 159 entities to reach 6 996 on 31 December 2000.

The considerable increase in numbers can mainly be explained by the creation of new specialised funds; in particular, sectoral funds investing in specific branches of the economy, such as communication, information technology, biotechnology, etc. In any case, the introduction of the euro has also contributed to the development of new funds whose investment policy is principally targeted towards mone-tary currencies, which at present do not form part of the Eurosystem, such as the Danish and Swedish crowns.

However, favourable growth of the investment fund sector is somewhat offset by the very slow start of international pension funds (ASSEP and SEPCAV), whose growth is still hindered by the absence of a regulatory framework.

The Luxembourg investment fund industry did not manage to repeat its exceptional performance of 1999, but it has nevertheless enjoyed a very prosperous year, which is evident from the 19.1% increase in the net value of assets. Net assets reached 874.6 billion euro.

### 5 External trade

Despite strong growth in exports and a dramatic reduction in Luxembourg's acquisition of large carrier aircrafts in comparison with 1999 the trade balance has only improved slightly in 2000. The structural component of imports therefore results in a continuous increase in the volume of imports absorbed by the national economy.

### 6 The balance of payments

The balance of payment surplus has increased by 26.5% in the last three quarters of 2000. This increase results almost exclusively from international trade in services and particularly from the performance of the financial sector, while the deficit in goods trade and in labour income flows have diminished over this period.

### 7 Public finance

Current government budget policy is based on the belief that balanced public finances will allow economic policy to adapt to future business cycle evolutions. With this aim, the government coalition agreement was committed to the following:

In order to keep public debt at a very low level and raise budget reserves and assets in investment funds, the Government is committed to maintain budgetary discipline. In particular, public expenditure growth will be closely monitored to keep it within the limits of economic growth in the medium-term.

In the past, the government tended to underestimate economic growth and thus also budgetary income and expenditures during the budget process. The 2001 budget however is based on an economic growth rate, which is more in line with international institutions' forecasts for the Luxembourg economy. As a result, the growth rates of different categories of income and expenditures are higher than in the year 2000 budget.

The budget has continued to grow over the year 2000. The tax cuts for households foreseen for 2002 in the coalition agreement came into force on 1 January 2001 and will be implemented in two steps.

The ratio of ordinary receipts of central government to GDP tends to decline in 2000. However, shared Union Economique Belgo-Luxembourgeoise revenues and the additional income from VAT will increa-

se this ratio further.

The increase in total expenditures by the central government is at or below that of GDP at current prices. However, the exceptional growth in GDP over the last few years means that an economic slow-down could rapidly lead to an increase in the share of total expenditures in GDP.

Moreover, for a small open economy the risk remains that an external shock leading to a slowdown will severely affect public receipts while expenditures, which are more structural in nature, cannot easily be reduced.

### 8 Stock market activity

The LuxX index closed at 1388 points at the end of the year 2000. Its value is practically unchanged compared to the end of 1999 (-0.7%). As a comparison, over the year 1999 the LuxX index gained 40%. In effect, the LuxX index could not avoid the drop in the main stock markets from the second quarter in 2000. Comparing the performances of international stock market indices, the LuxX index is among the better performers, behind Dublin and Milan.

### Abbreviations

BCL	Banque centrale du Luxembourg
CCBM	Correspondent central banking model
CPI	Consumer Price Index
CSSF	Commission de surveillance du secteur financier
ECB	European Central Bank
EMU	Economic and Monetary Union
ESCB	European System of Central Banks
EU	European Union
EUR	euro
GDP	Gross domestic product
IBLC	Institut belgo-luxembourgeois du change
IMF	International Monetary Fund
IML	Institut Monétaire Luxembourgeois
LIPS-Gross	Luxembourg Interbank Payment System - Gross Settlement System
LIPS-Net	Luxembourg Interbank Payment System – Net Settlement System
LUF	Luxembourg franc
MFI	Monetary Financial Institution
NCB(s)	National central bank(s)
OECD	Organisation for Economic Cooperation and Development
RTGS system	Real-Time Gross Settlement system
TARGET system	Trans-European Automated Real-time Gross settlement
	Express Transfer system
UCI	Undertaking for Collective Investments
UEBL	Union économique belgo-luxembourgeoise