

# CHAPTER II

## SUPERVISION OF THE BANKING SECTOR



1. Developments in the banking sector in 2003
2. Developments in the regulatory framework
3. Prudential supervisory practice

## SUPERVISION OF THE BANKING SECTOR

### 1. Developments in the banking sector in 2003

#### 1.1. Characteristics of the Luxembourg banking sector

Luxembourg banking law recognises three types of banking licences, namely licences governing the activities of universal banks (166 institutions having this status on 31 December 2003), those governing the activities of banks issuing mortgage bonds (3 institutions having this status on 31 December 2003) and those governing the activities of institutions issuing electronic means of payment (no institution having this status on 31 December 2003).

The universal banks comprise three categories according to legal status and geographical origin:

- banks under the law of Luxembourg (119 on 31 December 2003);
- branches of banks originating from a Member State of the European Union (43 on 31 December 2003);
- branches of banks originating from non-Member States of the European Union (7 on 31 December 2003)

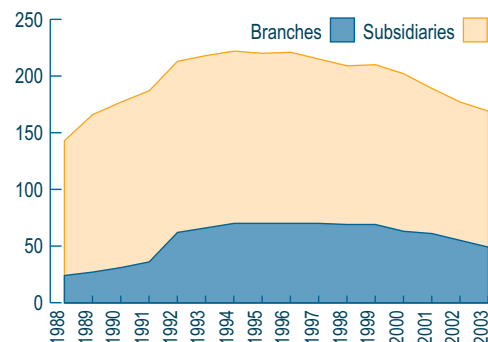
In addition, there is the special case of the unit formed by the *caisses rurales* (26 on 31 December 2003) and their central establishment, the Banque Raiffeisen, which, according to the law relating to the financial sector, is to be considered as a single credit institution.

#### 1.2. Developments in the number of credit institutions

The downward trend of the number of credit institutions established in Luxembourg was again confirmed in 2003. Indeed, the total number of banks only amounts to 169 as at 31 December 2003, compared to 177 as at 31 December 2002. The 169 entities comprise 119 Luxembourg-registered banks (2002: 122) and 50 branches (2002: 55).

Developments in the total number of banks established in Luxembourg

Year	Number of branches	Number of subsidiaries	Total number
1988	24	119	143
1989	27	139	166
1990	31	146	177
1991	36	151	187
1992	62	151	213
1993	66	152	218
1994	70	152	222
1995	70	150	220
1996	70	151	221
1997	70	145	215
1998	69	140	209
1999	69	141	210
2000	63	139	202
2001	61	128	189
2002	55	122	177
2003	50	119	169



The development of the total number of credit institutions notably depends on the following phenomena:

- Mergers, generally originating in the restructuring of the parent companies abroad, necessarily affect their Luxembourg presences, although the rate of mergers slowed down in 2003. Thus, three banks withdrew for this reason in 2003, against seven in 2002.
- Eight banks decided to cease their activities in 2003. One bank split into two new entities.

Liquidations / Mergers / Splits	Date of withdrawal from the official list of credit institutions
Crédit Agricole Indosuez Luxembourg	Withdrawal on 28.02.2003 (split into two new entities: Crédit Agricole Investor Services Bank Luxembourg and Crédit Agricole Indosuez Luxembourg)
Frankfurter Sparkasse, Luxembourg branch	Withdrawal on 31.03.2003
ING Bank (Luxembourg) S.A.	Merger with ING Luxembourg S.A. (formerly Crédit Européen S.A.) on 05.05.2003
BFI Bank AG, Luxembourg branch	Withdrawal on 23.05.2003
Volksbank Saar-West eG, Luxembourg branch	Withdrawal on 30.06.2003
BHW Allgemeine Bausparkasse AG, Luxembourg branch	Merger with BHW Bausparkasse AG, Luxembourg branch, on 01.08.2003
Banco Bradesco (Luxembourg) S.A.	Merger with Banco Mercantil de São Paulo International S.A. on 29.09.2003
Banque pour l'Europe S.A.	Withdrawal on 27.10.2003
Banco Popolare di Verona e Novara, Luxembourg branch	Withdrawal on 31.10.2003
KHB International S.A. Luxembourg	Withdrawal on 12.12.2003
WGZ-Bank Westdeutsche Genossenschaftszentrale eG, Luxembourg branch	Withdrawal on 31.12.2003
Banque Fédérative du Crédit Mutuel, Luxembourg branch	Withdrawal on 31.12.2003

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Four new banks started their activities in 2003. The banks Crédit Agricole Investor Services Luxembourg and Crédit Agricole Indosuez Luxembourg have been created through the split of Crédit Agricole Indosuez Luxembourg.

Creation	Shareholders	Date of registration on the official list of credit institutions
Kaupthing Bunadabanki, Luxembourg branch	Kaupthing Bunadabanki (Iceland)	1 January 2003
Crédit Agricole Investor Services Bank Luxembourg	Crédit Agricole Indosuez, Paris	28 February 2003
Crédit Agricole Indosuez Luxembourg	Crédit Agricole Indosuez, Paris	28 February 2003
Islandsbanki hf, Luxembourg branch	Islandsbanki hf (Iceland)	1 July 2003

The breakdown of the credit institutions according to geographical origin has changed as follows (2002 figures between brackets). The banks of German origin are still the highest in number with 49 (56) entities, followed by Belgian and Luxembourg banks, with 19 (19) entities. Other banks originate from France with 17 (17 entities), Italy with 16 (17) entities, Switzerland with 13 (11) entities, Sweden with 7 (6) and the United States with 6 (6) entities.

### Geographic origin of the banks

Country	Number
Germany	49
Belgium/ Luxembourg	19
France	17
Italy	16
Switzerland	13
Sweden	7
United States	6
Japan	5
United Kingdom	5
China	4
Portugal	4
Brazil	3
Israel	3
Netherlands	3
Denmark	2
Others	13
<b>Total</b>	<b>169</b>

### 1.3. Developments in the local branch networks in Luxembourg

The downward trend in branch networks recorded since the 1990s continued in 2003, as shown below.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Local branches	262	260	254	240	231	226	225	214	207	200
Banks concerned	11	11	11	11	11	10	9	9	8	8

The reduction in the number of local branches is one of the phenomena reflecting the general trend towards concentration in the sector. In this case, concentration takes place on a more local level, mainly affecting a specific type of activity, namely retail banking, and is motivated by cost-cutting measures. The services traditionally provided by local branches are being increasingly substituted by technical facilities (ATMs, home banking, phone banking, internet banking, etc.).

On the other hand, certain banks tend to relinquish the concept of small convenience branches providing only retail services for the benefit of larger branches, which serve, besides the customers of the retail banking, also private banking customers, and which dispose of an adequate infrastructure for this type of activity.

#### 1.4. Development in banking-sector employment

Total employment of Luxembourg credit institutions on 31 December 2003 reached 22,529 persons, representing a decrease of 771 persons (-3.3%) as compared to 31 December 2002.

Employment in the Luxembourg banking sector has been decreasing for two years due to the economic situation – the world economy growth has been slowing down – and due to structural reasons – consolidation and reorganisation of the production means. Banking employment thus decreased by 1,332 persons over two years, a development contrasting with the net creation of 2,664 jobs in 2000 and 2001.

However, the phenomenon in question does not affect the different credit institutions and business lines in the financial centre in the same manner. Firstly, it has to be noted that only 53% of the Luxembourg credit institutions cut their workforce in 2003. Among them are the large banks, which, affiliated to a large international group, must contribute to consolidated cost-cutting. Secondly, the restructurings mostly concern activities with less value added and high benefits from economies of scale. This trend appears in the employment statistics as the declines in workforce concentrate solely on bank employees and workers, whereas employment of senior managers and executives grows by 3% in a year.

Finally, the drop in workforce as observed in the banking sector does not necessarily come with a reduction in interior employment in the Grand Duchy. Indeed, the possibilities of reorganisation given to credit institutions by the new laws relating to management companies<sup>1</sup> and the other professionals of the financial sector<sup>2</sup> include the transfer of staff from banks to other professionals of the financial sector. These outsourcing practices even entail, in certain cases, a transfer of staff outside the financial sector, as is the case notably for the outsourcing of certain IT functions.

##### Distribution of the number of employees per bank

Number of employees	Number of banks	
	2002	2003
>1000	4	4
500 to 1000	6	4
400 to 500	3	4
300 to 400	7	6
200 to 300	9	11
100 to 200	18	19
50 to 100	23	21
<50	105	100

<sup>1</sup> Law of 20 December 2002 as amended concerning undertakings for collective investment.

<sup>2</sup> Please also refer to Chapter I on the law of 2 August 2003 concerning professionals of the financial sector.

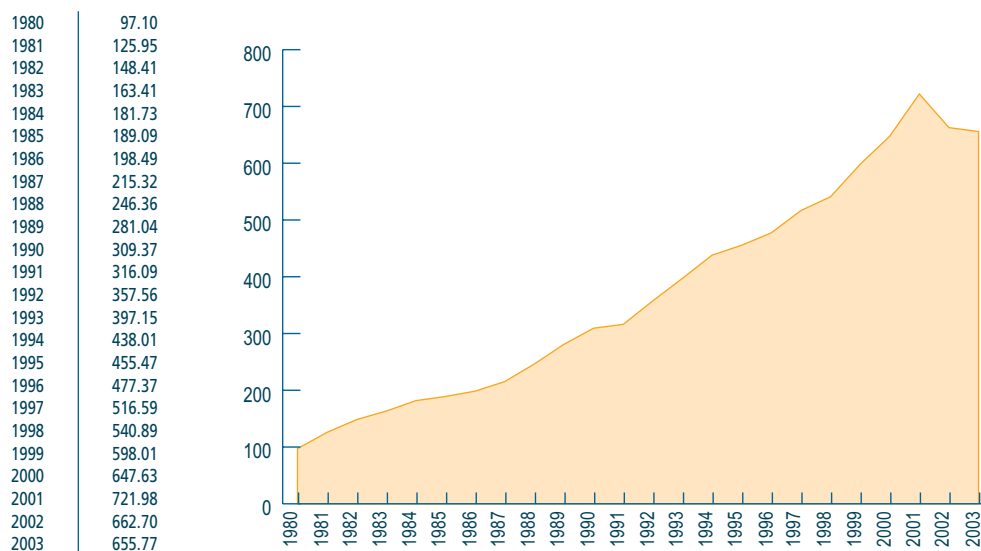
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	Total		Management			Office staff			Technical staff			Total workforce		
	Luxemb.	Foreigners	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
1993	8158	8567	2097	335	2432	6713	7396	14109	68	116	184	8878	7847	16725
1994	8116	9522	2308	384	2692	7086	7700	14786	47	113	160	9441	8197	17638
1995	8170	10113	2533	451	2984	7318	7813	15131	49	119	168	9900	8383	18283
1996	8113	10469	2658	490	3148	7476	7809	15285	48	101	149	10182	8400	18582
1997	8003	11086	2765	547	3312	7631	8013	15644	44	89	133	10440	8649	19089
1998	7829	12005	2900	577	3477	7846	8377	16223	47	87	134	10793	9041	19834
1999	7797	13400	3119	670	3789	8362	8961	17323	34	51	85	11515	9682	21197
2000	7836	15232	3371	783	4154	9030	9801	18831	35	48	83	12436	10632	23068
2001	7713	16148	3581	917	4498	9222	10046	19268	33	62	95	12836	11025	23861
2002	7402	15898	3654	977	4631	8941	9657	18598	25	46	71	12620	10680	23300
2003	7117	15412	3720	1049	4769	8486	9211	17691	23	40	63	12229	10300	22529

## 1.5. Development in balance sheet totals

Balance sheet totals posted by credit institutions fell to EUR 655,768 million at the end of 2003 from EUR 662,700 million at the end of 2002, which represents a decrease of 1.05% during 2003.

### Developments in balance sheet totals posted by credit institutions – in billions of EUR



### Aggregated balance sheet total - in millions of EUR

ASSETS	2002	2003 <sup>3</sup>	Variation in %	LIABILITIES	2002	2003 <sup>3</sup>	Variation in %
Loans and advances to credit institutions	342,707	339,933	-0.81%	Amounts owed to credit institutions	311,643	307,541	-1.32%
Loans and advances to customers	127,466	117,467	-7.84%	Amounts owed to customers	210,648	215,987	+2.53%
Fixed-income securities	142,697	148,975	+4.40%	Debts evidenced by certificates	71,801	69,199	-3.62%
Variable-yield securities	3,813	3,920	+2.79%	Various items	6,194	5,030	-18.79%
Participating interests and shares in affiliated undertakings	9,645	6,981	-27.62%	Permanent shareholders' equity <sup>(*)</sup>	62,414	58,010	-7.06%
Fixed assets and other assets	36,372	38,492	+5.83%	<i>of which profit for the year</i>	2,709	2,878	+6.26%
<b>Total</b>	<b>662,700</b>	<b>655,768</b>	<b>-1.05%</b>	<b>Total</b>	<b>662,700</b>	<b>655,768</b>	<b>-1.05%</b>

(\*) Including share capital, reserves, subordinated liabilities and provisions.

<sup>3</sup> Preliminary figures for the year ending 31.12.2003.

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- **Assets**

As far as assets are concerned, the drop in the balance sheet total essentially stems from a reduction in loans and advances to customers. Loans and advances to credit institutions and participating interests and shares in affiliated undertakings also fell. The other items of the banks' total assets however increased as compared to the end of 2002. The growth has been more substantial for fixed-income securities.

**Loans and advances to credit institutions** fell by 0.8% in 2003 to EUR 339,933 million, compared to a decrease of 5.4% in 2002, which was due to several important loans which had not been renewed. Loans and advances to credit institutions remained almost stable and represented 51.8%, reflecting the importance of interbank activities for the Luxembourg financial centre.

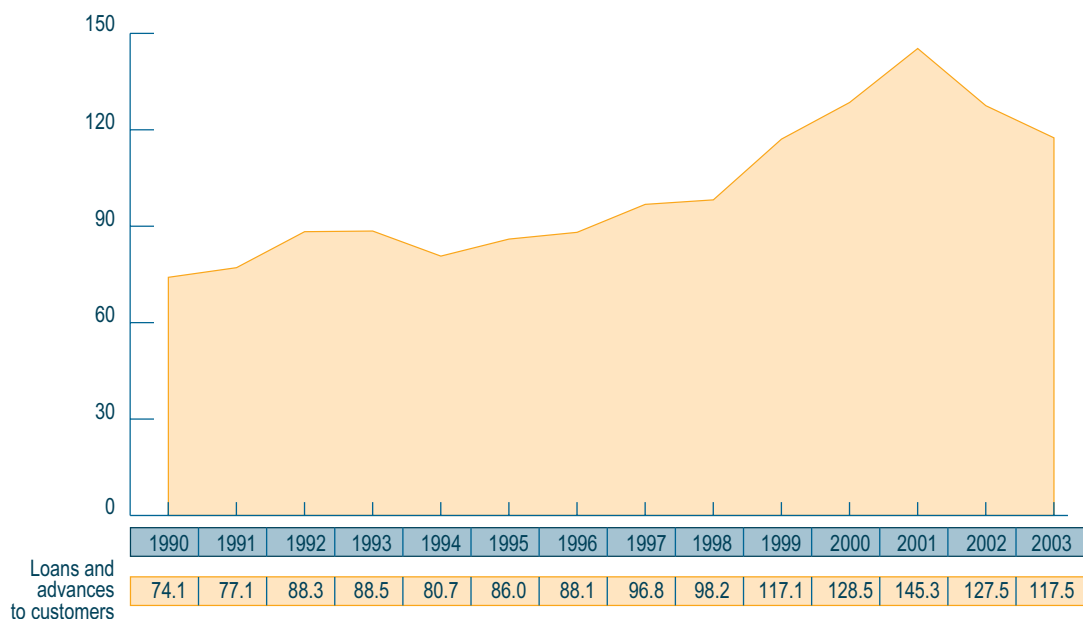
### Qualitative breakdown of interbank assets

	2001	2002	2003
Central and multilateral banks	0.33%	0.30%	0.15%
Banks Zone A <sup>4</sup>	98.62%	98.48%	98.25%
Banks Zone B <sup>5</sup>	1.05%	1.23%	1.60%

This breakdown shows that the vast majority of loans and advances to credit institutions consist of commitments on Zone A banks, i.e. banks of industrialised countries. The breakdown in relative terms remained relatively stable over the last three years. Loans and advances on central and multilateral banks, which have been weak anyhow, have however experienced a substantial fall.

The item **loans and advances to customers** fell by 7.8% and amounts to EUR 117,467 million, i.e. 17.9% of the balance sheet total, compared to EUR 127,466 million in 2002.

### Developments in loans and advances to customers – in billions of EUR



<sup>4</sup> Countries Zone A: Germany, Saudi Arabia, Australia, Austria, Belgium, Canada, South Korea, Denmark, Spain, United States, Finland, France, Greece, Hungary, Ireland, Iceland, Italy, Japan, Liechtenstein, Luxembourg, Mexico, Norway, New Zealand, Netherlands, Poland, Portugal, United Kingdom, Slovakia, Sweden, Switzerland, Czech Republic, Turkey.

<sup>5</sup> Countries Zone B: all countries other than Zone A.



## Breakdown of loans and advances to customers

	2001	2002	2003
Public authorities Zone A	4.68%	5.59%	6.78%
Public authorities Zone B	0.30%	0.19%	0.19%
Private customers and financial institutions	94.97%	94.17%	92.97%
<i>of which: legal entities</i>	54.14%	54.96%	52.50%
<i>of which: natural persons</i>	18.33%	21.32%	23.85%
<i>of which: financial institutions</i>	27.53%	23.66%	23.59%
Leasing	0.05%	0.05%	0.06%

Loans and advances to legal entities dropped by 13% in 2003. The volume of loans and advances to financial institutions fell by 9.1%. A more restrictive credit policy of banks as regards their corporate clients can explain this development. This trend is even more perceptible for exposures to certain risk sectors<sup>6</sup>. The volume of loans and advances to natural persons however increased by 1.9%. Overall, this resulted in an increase in relative terms of loans and advances to natural persons and a fall in loans and advances to legal entities. Loans and advances to public authorities, generally in the form of securities, continued to grow in relative terms in 2003. They are still only fairly represented with less than 7% of the total loans and advances to customers.

## Qualitative breakdown of loans and advances to private customers and financial institutions

	2001	2002	2003
Secured by public authorities	2.94%	3.97%	3.31%
Secured by credit institutions	17.69%	17.94%	16.63%
Secured by other tangible securities	27.97%	31.56%	32.57%
Unsecured	51.40%	46.53%	47.49%

After having grown in relative terms in 2001 and 2002, the secured part slightly decreased in 2003.

The portfolio of **fixed-income securities** rose by 4.4% following a decrease of the same order in 2002. This item reached EUR 148,975 million or 22.7% of the total balance sheet in 2003. The growth is essentially due to a strengthening of banks' holdings of high quality securities, notably in bonds of the public sector, as well as in bonds of credit institutions and other issuers of Zone A.

## Qualitative breakdown of fixed-income securities

	2001	2002	2003
Public sector zone A	24.10%	24.53%	25.37%
Public sector zone B	0.97%	0.61%	0.68%
Credit institutions zone A	50.98%	50.82%	50.14%
Credit institutions zone B	1.06%	0.97%	0.78%
Other issuers zone A	17.57%	18.73%	18.94%
Other issuers zone B	5.33%	4.34%	4.09%

<sup>6</sup> Please also refer to Chapter II, point 1.11. concerning exposures to high-risk sectors.

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The volume of the portfolio of **variable-yield securities**, i.e. equities, remains marginal, since Luxembourg banks are not very active in own-account trading of such stocks. This portfolio slightly recovered in 2003 (+2.8%), thanks to the improvement of stock exchange performances over the year.

The item **participating interests and shares in affiliated undertakings** decreased substantially in 2003 (-27.6%) and only represents 1.1% of the total balance sheet. The participating interests in banks, representing almost the whole item, dropped considerably over the year, notably due to provisions and withdrawal from certain activities abroad.

- **Liabilities**

As regards liabilities, amounts owed to credit institutions and amounts owed to customers developed in the opposite way.

**Amounts owed to credit institutions** fell to EUR 307,541 million (-1.3%). The interbank market remains the main source of refinancing of banks, with 46.9% of liabilities.

**Amounts owed to customers**, representing 32.9% of total liabilities, however increased by 2.5% to EUR 215,987 million at the end of 2003. Amounts owed to the public sector and legal entities rose whereas they had dropped in 2002. Amounts owed to natural persons (mainly deposits from private customers) continued to fall (-7.3% in 2003).

### Breakdown of amounts owed to customers

	2001	2002	2003
Amounts owed to the public sector	5.95%	2.84%	3.92%
Amounts owed to legal entities	63.84%	66.22%	68.30%
Amounts owed to natural persons	30.21%	30.94%	27.79%

**Amounts owed represented by securities** fell by 3.6% in absolute terms compared to 2002. With 10.6% of the total liabilities, this source of financing remains interesting especially for banks issuing mortgage bonds.

**Permanent shareholders' equity**, including subscribed capital, reserves, provisions, subordinated debts and accruals, decreased by 7.1% over the year to EUR 58,010 million at the end of 2003. This drop stems mainly from a reduction in accruals and the volume of provisions made by the banks on their exposures.

### 1.6. Movements in profit and loss account

The aggregated profit and loss account of the Luxembourg credit institutions just resumed its growth recently. Following a decrease of 5% in 2002, net results of the Luxembourg banks thus rose by 6% over 2003. The net provisioning, whose fall of 47% reflects the improvement of international economic perspectives, explains this growth. It must be remembered that in 2002, this item grew by 118% in a highly uncertain economic context.

## Profit and loss account - in millions d'EUR

	2001	Relative share	2002	Relative share	2003 <sup>7</sup>	Relative share
Interests and dividends received	51,942		41,257		34,116	
Interests paid	47,560		37,116		30,035	
<b>Interest-rate margin</b>	<b>4,382</b>	<b>55%</b>	<b>4,141</b>	<b>51%</b>	<b>4,081</b>	<b>54%</b>
Fee income	2,792	35%	2,615	32%	2,529	33%
Income from financial operations	355	4%	261	3%	475	6%
Other income	410	5%	1,044	13%	495	7%
<b>Banking income</b>	<b>7,939</b>	<b>100%</b>	<b>8,061</b>	<b>100%</b>	<b>7,580</b>	<b>100%</b>
General administrative expenses	3,227	41%	3,182	39%	3,091	41%
of which: staff costs	1,758	22%	1,809	22%	1,751	23%
of which: other administrative expenses	1,470	19%	1,373	17%	1,340	18%
Depreciation	396	5%	308	4%	289	4%
<b>Result before provisions</b>	<b>4,316</b>	<b>54%</b>	<b>4,571</b>	<b>57%</b>	<b>4,200</b>	<b>55%</b>
Creation of provisions	1,261	16%	1,824	23%	1,372	18%
Write-back of provisions	725	9%	658	8%	754	10%
Taxes	920	12%	685	8%	700	9%
<b>Result for the financial year</b>	<b>2,861</b>	<b>36%</b>	<b>2,720</b>	<b>34%</b>	<b>2,882</b>	<b>38%</b>

The **interest-rate margin**, which decreases by 1%, combines two contrasting developments: the fall in interest revenues (-5%) and the rise in dividends from participating interests (24%).

The drop in interest revenues reflects the decrease in the money market rates, which continued in 2003 and which reduces above all the permanent equity invested in a liquid form. The growth in income from participating interests stems from the recent turnaround of the economic situation, which has also benefited to the foreign subsidiaries of Luxembourg banks.

(in millions of EUR)	2001	2002	2003 <sup>8</sup>
Dividends received on participating interests	652	499	619

The reduction in **fee income** (-3%) is mainly due to the decrease in management fees. These fees, which are based on the assets under management, are decreasing owing to the depreciation of assets that followed the collapse of stock markets in 2002 and at the beginning of 2003. The downward trend of the fee income however reversed in the second quarter of 2003. Thanks to the performance of the stock markets, fee income thus recorded three consecutive quarters of growth. Furthermore, fees linked to financial operations for third parties remained unchanged.

**Income from financial operations** increased substantially. Their 82% rise is mainly due to the reversal of value adjustments on securities that are marked-to-market.

The 6% decrease in the banking income is mainly due to the item **other income**, whose 53% fall is attributable to the substantial extraordinary capital gains realised by Luxembourg banks in 2002.

Faced with a continuous decline in operating income, banks respond by cutting their expense budgets. This effort of cost-cutting resulted in a 3% decrease in **general costs** year-on-year. Administrative expenses however, falling by another 2%, seem to have bottomed-out. Staff costs decreased by 3% due to total employment that has dropped by 3% as well.<sup>9</sup>

<sup>7-8</sup> Provisional figures for the year ending 31.12.2003.

<sup>9</sup> See also Chapter II, point 1.4. relating to developments in banking sector employment.

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Despite the relative control of costs, gross income drops by 8%. The cost/income ratio increases to 45%, its average value over the last five years. This ratio compares favourably with the norm that large bank groups set as a target.

The banks decreased their **net provisioning** by 47%. This reduction has to be seen in the light of the spectacular strengthening (+118%) of this item in 2002. The reversal of the economic situation confirmed in the second half of 2003 and allowed the banks to reverse the provisions created as a precaution in 2002 and to reduce their new provisioning in 2003. The overall level of provisions remains relatively high.

Finally, **taxes** increase by 2%, while they had fallen by 26% in 2002 due to weak operational results. The increase in gross results had only been achieved at that time thanks to extraordinary results (capital gains) benefiting from a tax exemption.

### Structural ratios

	2001	2002	2003
Cost/income ratio	45.6%	43.3%	44.6%
Profit before taxes / average assets	0.55%	0.49%	0.54%
Profit before taxes / risk-weighted assets	22.4%	21.3%	23.5%
Profit before taxes / tier-1 capital	17.5%	14.4%	14.4%
Interest margin / banking income	55.2%	51.4%	53.8%
Income excluding interest / banking income	44.8%	48.6%	46.2%
Interest margin / average assets	0.64%	0.60%	0.62%
Creation of provisions for loans and advances to customers <sup>10</sup>	0.95%	1.01%	0.91%
Creation of provisions for affiliated undertakings <sup>11</sup>	1.2%	11.8%	7.2%
Creation of provisions for participations <sup>12</sup>	3.2%	11.7%	18.4%

The economic recovery is also reflected by the structural ratios in the form of an upturn of profitability indicators and a decrease in provision ratios. In this context, it has to be noted that the substantial increase in provisioning for participations (as a percentage of the gross amount of participations) is due to the withdrawal of a Luxembourg bank abroad. The growth is therefore not attributable to net provisioning, the latter having decreased by 20% as compared to 2002.

### Movement in certain indicators of profit and loss account by employee

(in millions of EUR)	2001	2002	2003
Banking income / employee	0.333	0.346	0.337
Staff costs / employee	0.074	0.078	0.078

With a banking income decreasing more rapidly than total employment, banking income by employee falls by EUR 9,397 to reach EUR 336,558 at the end of 2003. However, staff costs per employee remain stable at EUR 78,000.

<sup>10</sup> As a % of gross amount.

<sup>11</sup> As a % of gross amount.

<sup>12</sup> As a % of gross amount.

## 1.7. Off-balance sheet items and financial derivatives

Banks in the Luxembourg financial centre used derivatives totalling EUR 737.2 billion in 2003 against EUR 692.4 billion in 2002, representing an increase of 6.5%. The use of financial derivatives thus slightly grew compared to 2002. The ratio between the volume of derivatives and the balance sheet total reached 112.4% against 104.5% in 2002.

The strongest increase is recorded for options, which represent a volume of EUR 37.1 billion in 2003 against EUR 28.1 billion in 2002, i.e. an increase of 31.9%. This growth mainly concerns options traded on regulated markets and have thus affected the total volume of instruments traded on a regulated market: EUR 30.5 billion in 2003 against EUR 20.5 billion in 2002, representing an increase of 49%.

Options, generally linked to the issuance of covered instruments, stem from a small number of specialised credit institutions.

Instruments traded over the counter still remain the most widely used products (95.9% of the total in 2003 against 97% in 2002), with a volume amounting to EUR 706.7 billion against EUR 671.9 billion in 2002.

The volume of interest rate swaps, mainly used within the scope of the asset-liability management, grew a further 4.7% (EUR 662.1 billion in 2003 against EUR 632.3 billion in 2002). The interest rate swap thus remained the most significant derivative in terms of volume.

### Use of financial derivatives by credit institutions

	2002		2003 <sup>13</sup>	
	in billions of EUR	as a % of total balance sheet	in billions of EUR	as a % of total balance sheet
Interest rate swaps	632.3	95.4%	662.1	101.0%
Future or forward rate agreements	23.2	3.5%	27.1	4.1%
<i>of which: over the counter</i>	21.4	3.2%	24.8	3.8%
<i>of which: regulated market</i>	1.8	0.3%	2.3	0.4%
Futures				
(currencies, interest rates, other rates)	8.8	1.3%	10.8	1.7%
Options				
(currencies, interest rates, other rates)	28.1	4.2%	37.1	5.7%
<i>of which: over the counter</i>	18.2	2.8%	19.7	3.0%
<i>of which: regulated market</i>	9.9	1.5%	17.4	2.6%

During 2003, the CSSF refined the reporting of third-party assets held by banks<sup>14</sup>. While this category previously comprised all the securities deposits of the professional and non-professional customers, this amount is now broken down into the following categories:

- assets deposited by UCIs;
- assets deposited by clearing or settlement institutions;
- assets deposited by other professionals intervening in the financial markets;
- other deposited assets.

The CSSF has not published the amount of securities deposits before 2003, as this figure was difficult to interpret. Indeed, the technical functioning of the securities deposits in the banking system implies that the same securities can be deposited and sub-deposited with several professionals, entailing that the same securities are counted twice or even more times, which can lead to wrong interpretations of the total amount of securities deposits.

<sup>13</sup> Provisional figures as at 31.12.2003.

<sup>14</sup> For credit institutions under Luxembourg law and branches originating from third countries; branches originating from a Member State of the European Union are subject to a simplified reporting.

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This risk is however diminished, but not totally eliminated for the deposits of only the non-bank customers, UCIs and clearing or settlement establishments, so that the CSSF considered that these amounts can be published.

(in billions of EUR)	2003
Assets deposited by UCIs	895.4
Assets deposited by clearing or settlement establishments	275.9
Other deposited assets	338.1

### 1.8. Developments in own funds and in the solvency ratio

#### 1.8.1. Number of banks required to meet a solvency ratio

As at 31 December 2003, the number of banks required to meet a non-consolidated solvency ratio stood at 120, 119 of which were under Luxembourg law and one branch of non-EU origin. Among these banks, 95 carry out limited trading activities, and are therefore authorised to calculate a simplified ratio. Trading activities in the true sense remain confined to a limited number of banks.

Number of banks required to meet a solvency ratio	Integrated ratio		Simplified ratio		Total	
	2002	2003	2002	2003	2002	2003
Non-consolidated	24	25	99	95	123	120
Consolidated	15	14	16	14	31	28 <sup>15</sup>

#### 1.8.2. Developments in the solvency ratio

The figures below are based on consolidated figures for banks required to meet a consolidated solvency ratio.

At the end of 2003, the capital adequacy ratio reached a new record level, benefiting both from the increase in eligible own funds and the decrease in total capital requirements. The solvency ratio itself lies at 16.5%, easily exceeding the minimum threshold of 8% prescribed by current prudential regulations. Taking into account only core equity capital (Tier 1), the aggregate ratio for the Luxembourg financial market rose from 10.6% as at 31 December 2002 to a provisional figure of 12.7% at year-end 2003.

Lower activity in lending operations during 2003 resulted in a decrease in capital requirements for credit risk (-4.5%). Lending operations still make up the bulk of capital requirements. Capital requirements for risks linked to the banks' trading portfolios, negligible in terms of volume, decreased substantially as compared to 2002 (-10.2%). Capital requirements for foreign exchange risks remain marginal, confirming the downward trend that started in 2000.

Eligible own funds continue their positive development of the previous years. Thus, core capital, which represents 78% of total eligible own funds, rose by 5.5% due to the rise in the items "Paid-up capital" and "Share premium accounts, reserves and profits brought forward". Additional own funds (after capping) confirm their downward trend of the previous years and record a provisional volume of EUR 7,170 million as at 31 December 2003, i.e. -2.4% as compared to the previous year. The use of super additional own funds, as in 2002, needs also to be noted. Finally, participations decreased substantially (-67.4%). This fall can be mainly explained by a refocusing on non-strategic participations in other credit and financial institutions by certain banks of the financial centre. The impact on the solvency ratio denominator is significant as the participations concerned are to be fully deducted from eligible own funds.

<sup>15</sup> Banks, the participating interests of which are deducted from own funds on an individual basis do not need to calculate a consolidated ratio.

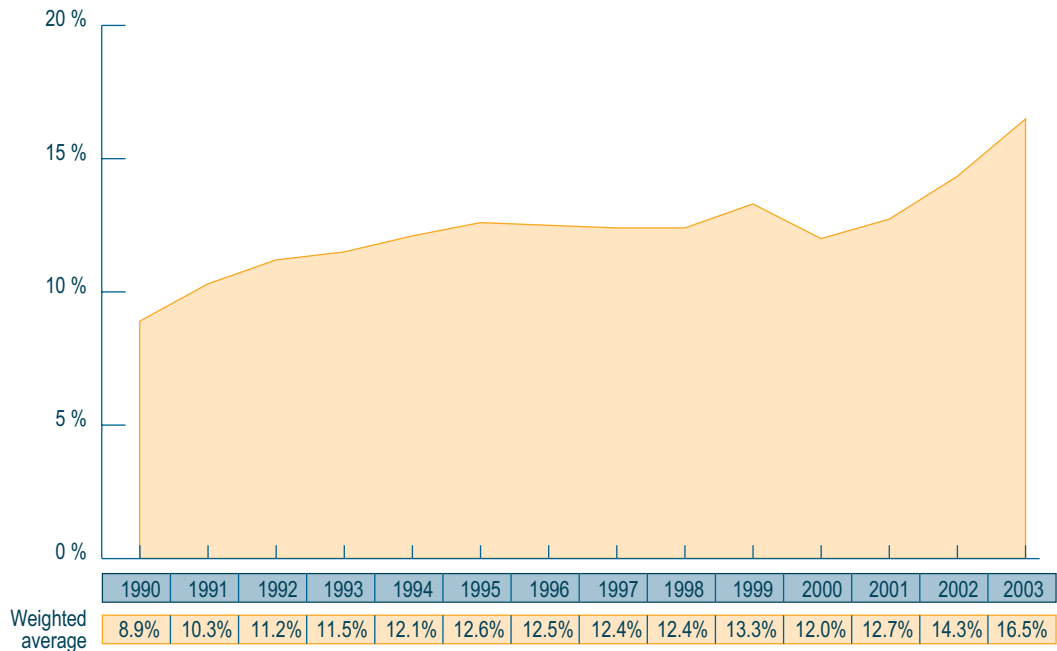
Numerator	(in millions of EUR)	
	2002 consolidated	2003 consolidated (provisional)
<b>Original own funds before deductions</b>	<b>24,748</b>	<b>25,750</b>
Paid-up capital	6,999	7,794
Silent participation	2,595	2,591
Share premium account, reserves and profits brought forward	12,277	12,887
Funds for general banking risks	2,036	1,824
Profits for the financial year	242	292
Specific consolidation items	598	361
<b>Items to be deducted from original own funds</b>	<b>-1,102</b>	<b>-796</b>
Own shares	-10	-1
Intangible assets	-90	-94
Losses brought forward and loss for the financial year	-188	-59
Specific consolidation items	-814	-642
<b>ORIGINAL OWN FUNDS (TIER 1)</b>	<b>23,645</b>	<b>24,954</b>
<b>Additional own funds before capping</b>	<b>7,387</b>	<b>7,227</b>
<b>Upper TIER 2</b>	<b>3,261</b>	<b>3,039</b>
Of which: cumulative preference shares with no fixed maturity	22	22
Of which: subordinated upper TIER 2 debt instruments	2,522	2,215
<b>Lower TIER 2</b>	<b>4,126</b>	<b>4,188</b>
Lower TIER 2 subordinated debt instruments and cumulative preference shares with fixed maturity	4,126	4,188
<b>ADDITIONAL OWN FUNDS AFTER CAPPING (TIER 2)</b>	<b>7,348</b>	<b>7,170</b>
<b>Super additional own funds before capping</b>	<b>121</b>	<b>115</b>
<b>SUPER ADDITIONAL OWN FUNDS AFTER CAPPING (TIER 3)</b>	<b>47</b>	<b>38</b>
<b>OWN FUNDS BEFORE DEDUCTIONS (T1+T2+T3)</b>	<b>31,041</b>	<b>32,162</b>
<b>ITEMS TO BE DEDUCTED FROM OWN FUNDS</b>	<b>2,427</b>	<b>792</b>
Items of share capital in other credit and financial institutions in which the bank owns interests exceeding 10% of their share capital	707	544
Items of share capital in other credit and financial institutions in which the bank owns interests less or equal to 10% of their share capital	1,720	248
<b>ELIGIBLE OWN FUNDS</b>	<b>28,614</b>	<b>31,370</b>
<b>Denominator</b>	<b>2002</b>	<b>2003</b>
<b>TOTAL CAPITAL ADEQUACY REQUIREMENT</b>	<b>15,962</b>	<b>15,221</b>
To cover credit risk	15,625	14,928
To cover foreign exchange risk	76	59
To cover trading risk	261	234
<b>Ratio</b>	<b>2002</b>	<b>2003</b>
<b>SOLVENCY RATIO (base 8%)<sup>16</sup></b>	<b>14.3%</b>	<b>16.5%</b>
<b>SOLVENCY RATIO (base 100%)</b>	<b>179.3%</b>	<b>206.1%</b>
<b>TIER 1 SOLVENCY RATIO (base 8%)</b>	<b>10.6%</b>	<b>12.7%</b>

<sup>16</sup> Eligible own funds/(total capital adequacy requirement \* 12.5).

## SUPERVISION OF THE BANKING SECTOR

The graph below shows the development of the solvency ratio (base 8%) since 1990. The weighted average is the ratio between total eligible own funds in the financial centre and total weighted risks. This average takes into account all credit institutions according to their volume of business.

### Developments in the solvency ratio (base 8%) since 1990



### 1.8.3. Development in the solvency ratio distribution (base 8%)

In non-aggregate terms, the high solvency ratio in the financial centre is reflected by a rather low number of banks whose ratio is situated within the medium capitalisation bands, i.e. below 11%. For instance, as at 31 December 2003, the percentage of banks with a solvency ratio below 10% stands at 6.7%. Conversely, more than two thirds of credit institutions of the financial centre record a solvency ratio exceeding 15%.

Distribution Ratio	Number of banks		as % of total 2003
	2002	2003	
<8%	0	0	0.0%
8%-9%	3	2	1.7%
9%-10%	3	6	5.0%
10%-11%	4	8	6.7%
11%-12%	9	7	5.9%
12%-13%	10	3	2.5%
13%-14%	6	7	5.9%
14%-15%	5	5	4.2%
15%-20%	24	29	24.4%
>20%	59	53	44.5%
<b>Total</b>	<b>123</b>	<b>120</b>	<b>100.0%</b>



### 1.9. International expansion of Luxembourg banks

The year 2003 was characterised by an international expansion that has been clearly slowing down compared to the previous years; certain activities abroad have even been abandoned.

Thus, certain subsidiaries of German banks closed their Irish presences. On the other hand, significant provisions had to be made on subsidiaries acquired at high prices before the stock market crisis in 2000.

As shown in the table below, external acquisitions are only few in numbers in 2003. Groups originating from Switzerland however continue to entrust their Luxembourg subsidiary with the mission to strengthen their presence within the European Union. Finally, restructurings within the groups sometimes lead the banks to increase their participating interests in other subsidiaries.

Overall, the international expansion of Luxembourg banks reveals mixed trends and the profitability of the companies acquired remains to be confirmed.

These reasons led the CSSF to consider the applications for approval more prudently. The CSSF pays particular attention to the fact that acquisitions should be made within a well-defined strategy taking into account the factor of profitability. Pure growth strategies should be avoided.

#### Creations and acquisitions in 2003 by Luxembourg banks of subsidiaries and branches abroad

Name of bank	Entity formed or acquired
Kredietbank Luxembourgeoise S.A.	acquisition of Theodoor Gilissen Bankiers N.V., Amsterdam
Société Générale Bank & Trust	acquisition of a majority participation in CBG Compagnie Bancaire Genève S.A.
Banque Privée Edmond de Rothschild Europe	opening of a branch in Brussels
UBS (Luxembourg) S.A.	opening of a branch in Vienna
Pictet & Cie (Europe) S.A.	opening of a branch in Madrid
Dexia Banque Internationale à Luxembourg	acquisition of 51% of Dexia Fund Services Italia in Milan
Dexia Banque Internationale à Luxembourg	increase of the participation to 100% in Dexia Securities NV in Amsterdam

## SUPERVISION OF THE BANKING SECTOR

### Branches established in the EU / EEA as at 31 December 2003

Country of origin	Luxembourg branches established in the EU / EEA	Branches of EU / EEA banks established in Luxembourg
Germany	1	20
Austria	1	-
Belgium	2	1
Denmark	-	-
Spain	3	-
Finland	-	1
France	-	6
Greece	-	-
Ireland	3	-
Iceland	-	2
Italy	-	4
Liechtenstein	-	-
Norway	-	-
Netherlands	-	-
Portugal	2	2
United Kingdom	4	4
Sweden	1	2
<b>Total</b>	<b>17</b>	<b>42</b>

### Freedom to provide services in the EU / EEA as at 31 December 2003

Country	Luxembourg banks providing services in the EU / EEA	EU / EEA banks providing services in Luxembourg
Germany	41	28
Austria	22	6
Belgium	48	17
Denmark	25	7
Spain	34	4
Finland	19	3
France	49	48
Greece	21	-
Ireland	19	27
Iceland	3	-
Italy	38	2
Liechtenstein	1	1
Norway	8	3
Netherlands	39	24
Portugal	25	6
United Kingdom	33	40
Sweden	19	1
<b>Total of notifications</b>	<b>444</b>	<b>217</b>
<b>Total number of banks concerned</b>	<b>67</b>	<b>217</b>

### 1.10. Banks issuing mortgage bonds

The banks issuing mortgage bonds continued their positive development during 2003. Indeed, as at 31 December 2003, the balance sheet total of the three banks issuing mortgage bonds totalled EUR 26.841 billion and the total volume of public sector mortgage bonds issued by these three banks reached EUR 17.725 billion, compared with EUR 12.99 billion at the close of the financial year 2002.

Issues of mortgage bonds are guaranteed by ordinary cover assets and by substitute cover assets. As at 31 December 2003, cover assets totalled EUR 19.2 billion, meaning that the mortgage bonds in circulation benefit from total over-collateralisation (nominal value) of EUR 1.475 billion, i.e. 8.3% of total volume. The ordinary cover assets of municipal bonds for the three banks in question break down as follows:

- claims on or guarantees from public organisations: EUR 5.11 billion;
- bonds issued by public organisations: EUR 10.585 billion;
- municipal bonds of other issuers: EUR 799 million;
- derivative transactions: EUR 1.142 billion.

Besides these ordinary cover assets, the banks used substitute cover assets amounting to EUR 1.563 billion as at 31 December 2003.

Due to the faultless quality of investments of specialised banks and the scale of over-collateralisation in relation to the mortgage bonds issued, public sector mortgage bonds continue to receive an AAA rating from the rating agency Standard & Poor's.

The CSSF strengthened its prudential supervision of the banks issuing mortgage bonds during 2003. In June 2003, the CSSF introduced a new requirement within the scope of special monthly reporting to be made by the banks issuing mortgage bonds: in order to take account of the interest rate risk and the real value of derivative products, the banks are required to report on a monthly basis, besides the amount of nominal over-collateralisation, the amount of over-collateralisation established according to the current net value. As at 31 December 2003, the over-collateralisation of cover assets compared to mortgage bonds issues, established according to the current net value, reached EUR 2.119 billion for the three banks.

Furthermore, following the publication of circular CSSF 03/95, aiming at clarifying the missions and obligations conferred upon the special auditor by law, the reports were drawn up according to these new requirements.

Although the law of 21 November 1997 allows the banks issuing mortgage bonds to issue municipal bonds as well as mortgage bonds, the Luxembourg banks continued to limit their main activities in 2003 to municipal bonds covered by sovereign debtors. However, the first mortgage bonds are expected to be issued in 2004.

### 1.11. Exposure to high-risk sectors

The twenty most important credit institutions of the financial centre have been requested by circular letter of 29 November 2001 to provide information concerning their exposures to certain sectors more particularly hit by the unfavourable economic environment. Thus, they report, on a quarterly basis, their exposures towards the sectors of telecommunications, media and technology, transport, aviation, tourism and leisure industry, as well as the insurance sector. These twenty institutions cover 63.6% of the total balance sheet of the financial centre in 2003.



## SUPERVISION OF THE BANKING SECTOR

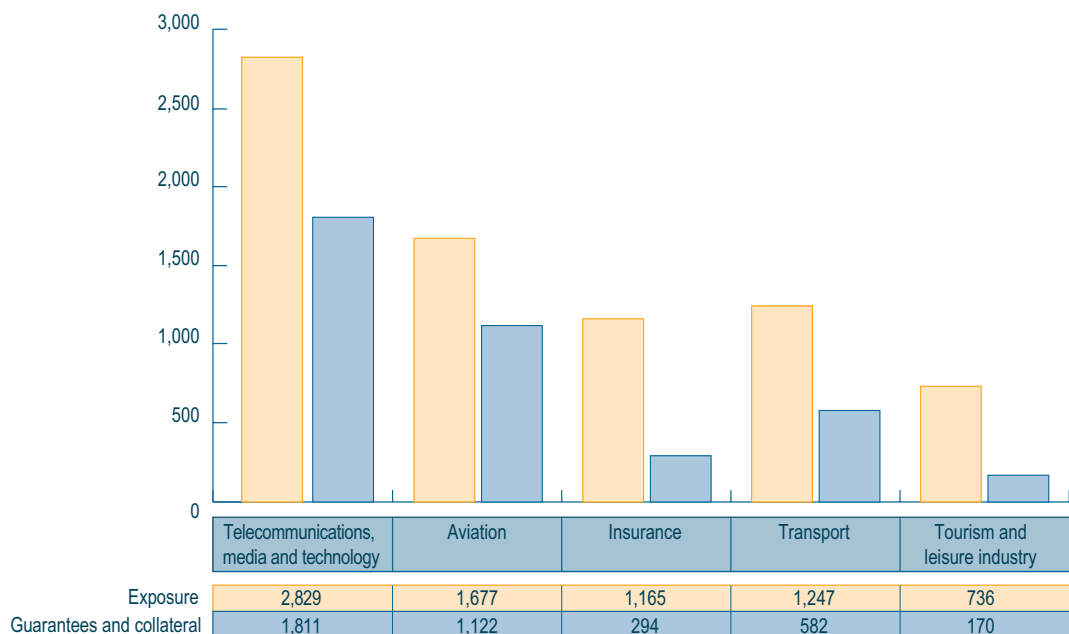
In 2003, the CSSF closely monitored the development of the reported risk exposures. The following table summarises the recent development of loans, net of specific provisions, drawn by the different sectors. Overall, the risk exposures taken into consideration represent 1.2% of the total balance sheet of the banks of the financial centre at the end of 2003.

<i>(in millions of EUR)</i>	Exposure at the end of 2002	Exposure at the end of 2003	Variation in %
Telecommunications, media and technology	3,855	2,829	-27%
Aviation	2,107	1,677	-20%
Insurance	1,392	1,165	-16%
Transport	1,071	1,247	+16%
Tourism and leisure industry	734	736	0%

The global risk exposure recorded a substantial decrease of 16.4% during 2003. Exposure towards the telecommunications, media and technology sector registered the most significant decrease, i.e. 26.6% over the year. This development has to be put into the context of a 7.8% fall of loans and advances to customers and can be explained by the adoption by banks of a more restrictive credit policy. The banks thus adopted a more prudent approach for their positions towards certain high-risk sectors.

The following graph shows the degree of credit risk mitigation of the exposures. Overall, the exposures are covered up to 50% through guarantees/collateral. The coverage ratio is highest for the aviation sector (66.9%) and for the telecommunications, media and technology sector (64%).

**Risk positions at the end of 2003: exposure and guarantee/collateral – in millions of EUR**



The CSSF applies strict eligibility requirements as regards guarantees/collateral. Only guarantees and collateral of outstanding quality and liquidity are taken into account for internal analysis. In certain cases, haircuts that take into account the non-covered residual risk are deducted from the gross amount of guarantees.

The table below sets out own funds of banks with exposures to high-risk sectors. It also gives a fair outline of the coverage of risk exposures considered by own funds.

Sector	Own funds of banks with risk exposures (in millions of EUR)	Ratio between exposure and own funds	
		Highest ratio for systemic banks	Ratio for the three most exposed banks
Telecommunications, media and technology	23,244	21%(*)	16%(*)
Aviation	22,634	33%	23%
Insurance	21,194	7%	7%
Transport	21,844	19%	18%
Tourism and leisure industry	21,018	10%	9%

(\*) highest ratio among those calculated separately for the telecommunications, media and technology sectors.

The first ratio analysed by the CSSF relates the risk-sector exposure to the own funds of the individual banks. For each sector, the table shows the highest ratio observed among the systemic banks. The second ratio calculates the same percentage as regards the three banks having the highest risk-sector exposures. Neither of these ratios indicates an abnormal concentration. The risk concentration of banks is highest for the aviation sector. However, the exposure towards this sector decreased substantially from the third quarter 2001.

The decrease in ratios relating the sector exposure to the own funds of the banks has been particularly marked in 2003 due to the joint impact of a policy consisting in reducing risk exposures and a strengthening of the banks' own funds.

Capital buffers constituted mainly by lumpsum provisions allow most of the banks to absorb possible losses incurred in high-risk sectors without their own funds being directly affected.

Several stress tests allowed the CSSF to better differentiate the quality of guarantees and the counterparty risk. Overall, these tests did not reveal a particularly preoccupying situation as regards the risk-sector exposures in 2003. The decrease in net exposures and the strengthening of own funds more than offset the increased exposures to certain sectors that the CSSF closely monitors.

Finally, the CSSF carried out punctual analyses of other high-risk sectors in 2002/2003. Thus, it took particular interest in the exposures of Luxembourg banks to the real estate sector. A study was carried out concerning the institutions of the financial centre that are particularly active in the financing of residential and commercial real estate. The CSSF examined the exposures of the banks to the Luxembourg real estate sector, differentiating on the one hand between the loans granted to private persons for the financing of their private real estate and, on the other hand, the loans granted to promoters to finance apartment blocks and loans granted to finance office buildings. The banks were also requested to provide their own appraisal of the exposures to the real estate sector by differentiating between these three types of financing.

## SUPERVISION OF THE BANKING SECTOR

The responses to the CSSF's survey show that the quality of the loans granted to private persons and to promoters of apartment blocks remains high in general. New applications for loans are accepted according to strict criteria concerning the quality of the borrower and the part of own financing. The quality of the portfolio of loans granted for the financing of office buildings (9.7% of the exposures of the banks participating in the survey on the Luxembourg real-estate sector) is overall satisfactory. Speculative commitments (rate of pre-sale or pre-leasing below 70%) are a minority part. The banks closely follow the development of these loans of which some encounter problems. The majority of the banks have adopted a more prudent, even restrictive approach, to accept new applications for loans concerning the financing of office buildings.

### 2. Developments in the regulatory framework

#### 2.1. Circular CSSF 03/95 on the minimum requirements regarding management and control of the pledge register, cover assets and the limit of mortgage bonds in circulation

The circular, which is aimed at banks issuing mortgage bonds and at their special auditor, specifies a certain number of provisions of article 12-7 of the law of 5 April 1993 on the financial sector as amended relating to the supervision of cover assets recorded in the pledge register.

Firstly, it defines the requirement as regards the professional qualifications of the auditors in order carry out the mandate of special auditor of a bank issuing mortgage bonds.

Secondly, the circular provides further explanations on the monitoring of cover assets. Indeed, the special auditor must ensure that the cover assets are duly constituted and registered in the pledge register, that they continue to exist and reach the amount provided for by law. The circular thus specifies the way the bank must maintain and manage the pledge register in order to allow the special auditor to carry out his duties.

Moreover, the circular sets out the various limits imposed on the banks issuing mortgage bonds, whose compliance must be supervised by the special auditor. To this end, it lists the various ratios that banks issuing mortgage bonds must respect within the scope of the legal requirement, which provides that the total nominal amount of mortgage bonds in circulation must at any time be fully covered by cover assets.

Finally, the circular lays down the minimum requirements regarding the contents of the special auditor's report that must be submitted to the CSSF on a yearly basis.

#### 2.2. Circular CSSF 03/100 concerning the publication on the Internet of CSSF instructions:

- *Recueil des instructions aux banques* of the CSSF
- Schedule of Conditions for the technical implementation of the CSSF reporting requirements – SOC/CSSF

In its circular of 1 April 2003, the CSSF announces the publication of the *Recueil des instructions aux banques* and of the Schedule of Conditions for the technical implementation of the CSSF reporting requirements - SOC/CSSF on its website (direct link: [www.cssf.lu/fr/report/rperiod/html](http://www.cssf.lu/fr/report/rperiod/html)).

The CSSF *Recueil* contains the prudential and accounting instructions for the periodic reporting of the banks to the CSSF, as well as instructions specifying the form and content of the accounts intended for publication. The Schedule of Conditions for the technical implementation of the CSSF reporting requirements – SOC/CSSF contains the technical instructions for the communication in electronic form of the periodic reporting of banks and UCIs.

The CSSF *Recueil* and the SOC are published exclusively on the Internet in PDF format and can be freely accessed. Any changes thereto will be notified to the entities supervised by the CSSF through circulars or circular letters as in the past.

The CSSF website contains only the instructions relating to the prudential tables (tables B, E and O). Technical instructions relating to the statistical tables (tables S), of which the Luxembourg Central Bank (BCL) is in charge, are available on the BCL website ([www.bcl.lu](http://www.bcl.lu)).

The new version of the *Recueil*, as published on the website, is a revised and updated version of the *Recueil* published by the IML in 1992 when the new accounting scheme was introduced. However, it does not contain any fundamental change as compared to last IML version. Thus, several changes concern the presentation, others concern the substance and a set of changes take into account the instructions or specifications communicated to the banks since 1992 by means of circulars, circular letters or on an *ad-hoc* basis. The instructions concerning the information to be published (“VISA” procedure) as communicated in the circular letters the CSSF published annually since the introduction of the new accounting scheme in 1992 have been integrated into Part V “Information for publication” of the *Recueil*. Details of all these changes are available for consultation on the CSSF website in the marked-up version.

The new version of the SOC only contains minor changes to the contents as compared to the former version dated November 1997; these changes are marked up in the text. All the changes are contained in a separate document called “MAJSOC” and published together with the SOC.

### 2.3. The implementation of the IAS<sup>17</sup> regulations in Luxembourg

Before taking a decision on the implementation of the IAS regulations in Luxembourg, the CSSF launched a survey with the banks on 13 December 2002. This survey revealed that the vast majority of banks of the financial centre is in favour of applying the IAS for published accounts (annual and consolidated) as well as for the prudential reporting. Concerns have however been voiced as regards the tax effect.

In order to take concrete measures, the CSSF actively participates in a working group under the aegis of the Ministry of Justice, gathering professional organisations (banks, insurance undertakings, trade, industry), as well as public organisations (authorities for prudential, tax, statistical matters). The purpose of this working group is to define a coordinated approach as regards the introduction of IAS in the financial centre and to achieve the adaptation of the tax and company law.

As regards the publication of consolidated accounts, the non-listed banks have the possibility to apply the IAS standard as from its transposition into national law, while the listed banks will have to publish their consolidated accounts as of 2005. The banks of which only the bonds are listed however have the right to publish their consolidated accounts according to the IAS standards solely as of 2007. Banks already have the option to publish their consolidated accounts according to IAS standards on the condition that they append a conciliation with the accounting rules currently in force.

The CSSF considers giving the banks the option to publish both their consolidated and annual accounts under IAS standards insomuch as a solution is found regarding taxes and maintenance of capital. The application to annual accounts may be admitted as from the close of 2007.

<sup>17</sup> International Accounting Standards (IAS) or International Financial Reporting Standards (IFRS) according to the denomination of the new international accounting standards adopted by the International Accounting Standards Board (IASB).

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The application of the IAS standards to the published accounts requires an amendment of the law of 17 June 1992 on the banks accounts, which will also address the transposition of the Directives "Fair Value" and "Modernisation of accounting Directives".

As regards prudential reporting, the CSSF considers introducing an IAS reporting as from 2007 on an individual as well as consolidated basis. The reporting will cover all the IAS requirements by taking also into account the prudential concerns specific to the CSSF.

### 3. Prudential supervisory practice

#### 3.1. Objectives of supervisory practice

Supervision of banks aims at the following:

- ensuring the security of the public's savings by monitoring the solvency and prudent management of individual banks;
- ensuring financial stability and proper functioning of the banking system as a whole;
- protecting the reputation of the financial sector by censuring ethically unacceptable conduct.

In order to fulfil these objectives of public interest, the CSSF monitors application by credit institutions of the laws and regulations relating to the financial sector.

#### 3.2. Monitoring of quantitative standards

Quantitative standards, designed to ensure financial stability and risk spreading by credit institutions, relate to:

- evidence of minimum equity capital;
- a maximum ratio between own funds on the one hand and risk exposure on the other;
- limitation of the risk concentration on a single debtor or a group of associated debtors;
- liquidity ratio;
- limitation of qualified participating interests.

In 2003, the CSSF did not have to intervene in any instances of violations of capital ratio. It intervened on four occasions with regard to non-compliance with liquidity ratios and on thirteen occasions with regard to exceeded limits on large exposures. These breaches often resulted from difficulties in interpreting regulations and could be rapidly regularised.

#### 3.3. Monitoring of qualitative standards

The CSSF relies on several instruments to assess the quality of the banks' organisation:

- analytical reports prepared by external auditors;
- management letters and similar reports prepared by external auditors;
- on-site inspections undertaken by CSSF agents;
- reports prepared by internal auditors of the banks.

These reports are processed according to a methodology described in the CSSF's internal procedures. The reaction of the CSSF depends on the seriousness of the problem raised and whether it is repetitive in nature. It varies from simple monitoring of the problem on the basis of reports, through the preparation of deficiency letters, to convening the bank's management or on-site inspections undertaken by CSSF agents. Where necessary, the CSSF may use its formal powers of injunction and suspension of managers or activities.



During 2003, the CSSF sent 132 (204 in 2002) deficiency letters to banks based on shortcomings in terms of organisation.

The most frequent issues that arose were the following:

- procedure manual (degree of precision, regular updates, etc.);
- equal powers of the approved managers;
- adequate segregation of duties;
- unsatisfactory or ill-tested business continuity plan;
- hierarchical position of the internal audit;
- supervisory system of margin lending: frequency of assessments, consideration of all the exposures (including forward transactions and assimilated), deficiencies in the legal records, procedure to start liquidation of cover assets;
- IT security, control of access rights;
- process of sending and delivering mail;
- cash transactions not exclusively carried out by the cashier;
- insufficient supervision of the internal and dormant accounts;
- weaknesses relating to rules of conduct as laid down in circular CSSF 2000/15 and notably absence of a written warning on the risks concerning derivatives.

### 3.4. Analytical report

The analytical report prepared by the external auditor is one of the most important instruments to assess the quality of the organisation and the exposure to different risks. The CSSF requires the preparation of an analytical report on a yearly basis for each Luxembourg credit institution as well as for each Luxembourg branch of non-EU credit institutions. Furthermore, credit institutions supervised on a consolidated basis are required to submit a yearly consolidated analytical report and individual analytical reports of each subsidiary included in the consolidation, carrying out an activity of the financial sector.

Analytical reports were made compulsory in 1989 through a circular, which was reformed in 2001 (circular CSSF 01/27) in order to take account of the development of the regulatory and prudential framework.

In 2003, the CSSF analysed 253 analytical reports, 27 of which were consolidated analytical reports and 81 were analytical reports of subsidiaries.

### 3.5. Co-operation with external auditors

Article 54 of the law of 5 April 1993 on the financial sector as amended governs the relationship between the CSSF and the external auditors. This article confers upon the CSSF the power to establish the regulations relating to the audit mandate and the content of the audit report. The professional supervised shall communicate all the reports issued by the external auditor within the course of the audit of annual accounts to the CSSF.

Furthermore, the external auditors are also required to inform the CSSF immediately of any serious facts, defined more specifically under article 54(3) of the aforementioned law, which have come to their attention in the course of their duties.

The supervision of the CSSF is largely based on the work of the external auditors and their reports. Since 2002, the CSSF holds annual meetings with the main audit firms in order to exchange views on specific issues encountered. Discussions also concerned the quality of the reports and the results of the inspections.

Besides these more general meetings, the CSSF held separate meetings with two auditors to discuss specific issues encountered with two banks.

## SUPERVISION OF THE BANKING SECTOR

### 3.6. On-site inspections

The CSSF intensified its efforts as regards on-site inspections even more in 2003. Thus, 62 inspections were carried out in 2003, against 47 in 2002.

The programme of inspections to be carried out during the year is set up at the beginning of the year and is based on the assessment of the risk areas of the various credit institutions. The objective thereof is on the one hand to be present at the important credit institutions and on the other hand to supervise the other institutions following a schedule covering several years.

Inspections carried out by CSSF agents generally follow standard inspection procedures, in the form of discussions with the persons responsible, assessment of procedures and the verification of files and systems.

During the year under review, the CSSF focused especially on compliance with the rules as regards money laundering. Twenty inspections concerned this subject (please refer to point 3.7. hereafter).

As the CSSF accompanies the banks' preparation for the implementation of the new regulations on own funds ("Basel II"), fifteen on-site visits concerned this subject (please refer also to Chapter X, point 2.1.1. regarding the new capital adequacy regime).

A substantial part of the on-site inspections consisted in specific investigations into particular issues and matters. In 2003, seventeen inspections concerned this category. The other inspections concerned various subjects such as market activity and lending activities.

### 3.7. Combating money laundering

In order to safeguard the reputation of the Luxembourg financial centre, the control of compliance with the anti-money laundering regulations is one of the CSSF's priorities and aims at ensuring that the Luxembourg financial sector applies first-rate know-your-customer standards, without taking account of commercial considerations. The International Monetary Fund regularly reviews the CSSF's action: the IMF detected no significant flaw and the CSSF endeavours to immediately implement the punctual recommendations of the IMF.

The CSSF uses the following instruments to supervise compliance with these rules: inspections carried out by CSSF agents, reports of external auditors and those prepared by internal auditors.

During the year under review, the CSSF sent 94 deficiency letters to the banks in relation with shortcomings concerning money laundering (93 in 2002). These letters, based on on-site inspections and external or internal audit reports, list the shortcomings identified and enquire about the corrective measures envisaged. In more serious cases, the CSSF requires that a detailed plan of action with time limits be set up.

In 2003, the CSSF carried out twenty missions to control compliance with anti-money laundering rules. The banks concerned were chosen according to volume and type of activity as well as to the origin of their clients. Overall results were positive as far as identification of customers and of the funds' origin are concerned. Furthermore, a high level of awareness of the persons responsible was noted.

The following weaknesses led the CSSF to intervene with the banks:

- The banks do often not have enough information on the professional background of their clients, the funds' origin and the reason for starting the relationship. The CSSF insists that the banks collect sufficient information on these points, where applicable with corroborating documents. Even if the regularisation actions required by the CSSF sometimes encountered

public incomprehension in Luxembourg, the CSSF considers that the Luxembourg public must get used to be questioned by banks on the funds' origin, the activities carried out, the justification of certain transactions through corroborating documents, etc.

- The banks must gain a better understanding of the transactions carried out by their clients in order to detect those that do not correspond to the profiles defined when entering into the relationship.
- As regards the supervision of operations in order to detect any suspicious transactions, it becomes more and more essential that computerised processes be set up.
- The name of the originator must be indicated on the transfer orders.
- Where technical aspects relating to client identification are delegated to professional intermediaries, this co-operation must be settled by a regularly updated contract. This co-operation, even if it involves other professionals subject to a prudential supervision, does not exempt the banks from their professional obligations as regards the identification of the funds' origin, the reason for entering a relationship and the type of transactions concerned.
- Where the banks rely on independent intermediaries, they must enquire about the reputation of the latter and ensure that they have the appropriate authorisation to carry out this type of activity.
- The CSSF reminded the banks that employees likely to apply anti-money laundering rules must get regular training in order to be brought up to date on the fast developing regulations.

The programme of inspections for 2004 provides for the continuation of inspections concerning compliance with anti-money laundering obligations.

The yearly analytical report prepared by external auditors must specifically cover compliance with legal requirements and the adequate application of internal procedures concerning the prevention of money laundering. The main deficiencies observed are about the same as those noted by the CSSF.

The Law requires that banks with branches or subsidiaries abroad ensure that these entities comply with Luxembourg professional obligations in addition to the standards of the host country. The CSSF verifies compliance with this requirement by means of analytical reports of external auditors to be prepared for each subsidiary carrying out an activity of the financial sector. Furthermore, the CSSF requires that the internal audit of the Luxembourg parent company periodically verify that subsidiaries and branches abroad comply with the group's directives on anti-money laundering. The results of these inspections must be included in the summary report, which has to be submitted to the CSSF on an annual basis.

The CSSF had to intervene on several occasions with respect to weaknesses as regards the fight against money laundering observed at subsidiaries and branches abroad. It has to be particularly stressed that the groups' managements must pay special attention to this matter and ensure that the groups' directives be uniformly applied by all the entities.

### 3.8. Management letters

Management letters drawn up by external auditors for the attention of the banks' management are an important source of information on the quality of the organisation of credit institutions. In these reports, the external auditors point out weaknesses they observed in the internal control system in the course of their assignment. During 2003, the CSSF analysed 111 management letters.

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### 3.9. Meetings

The CSSF regularly conducts meetings with bank executives to discuss business and any problems. It also requires prompt notification by the banks if a serious problem arises.

In 2003, 220 meetings were held between CSSF representatives and bank executives.

### 3.10. Specific controls

According to article 54(2) of the law of 5 April 1993 on the financial sector as amended, the CSSF has the right to require an external auditor to conduct a specific audit in a given institution. As in previous years, the CSSF did not formally make use of this right, but invited some banks to appoint themselves an external auditor to audit a specific area. Five controls of this type took place in 2003.

### 3.11. Internal audit reports

The CSSF takes into account the work of the internal audit when assessing the quality of the organisation and risk management by analysing the summary report which the internal auditor must prepare each year. In 2003, the CSSF analysed 135 summary reports. It also requested 74 specific internal audit reports in order to obtain more detailed information on particular subjects.

### 3.12. Specific problems: fraud and malfunctioning

As in previous years, some banks were exposed to fraudulent activities of employees or malfunctioning of the organisation, which led to financial losses. The present section describes typical cases in order to enable banks to draw organisational lessons. These cases illustrate how compliance with certain essential organisational rules allows to prevent such situations, or at least makes them less likely to happen.

#### *Organisation of the "discretionary management" function*

The CSSF was confronted with a case of malfunctioning of the discretionary management function similar to those encountered in the previous years.

The problem stems from the fact that clients who are not officially under a discretionary management and who are therefore supposed to be at the origin of the transactions made on their accounts, start to let their manager, on a more or less tacit agreement, carry out the transactions decided by the latter. This situation can entail disputes in case of losses and the burden of proof is particularly difficult to establish as the following situations can arise:

- The manager has carried out transactions without the client being aware of it, simulating orders over the telephone; the bank must of course compensate the client.
- The manager effected transactions on his own initiative, but based on a tacit agreement with the client. As long as the transactions generate gains, the client does not contest them. As soon as losses are sustained, the client affirms not to be aware of these transactions.
- The client gave orders over the phone, but contested them afterwards.

*A posteriori*, it is difficult to establish how the contested transactions have been initiated. Hence the importance of an organisation that allows to provide evidence supporting the bank's legal position. The main elements of an adequate organisation are as follows:

- The systems to send mail must be infallible and imperative. As the general terms and conditions of the banks provide in general for a time frame of 30 days to dispute operations, it is essential that banks are able to establish the proof that the statements of account have been sent to the client. This is why clients should sign an acknowledgment upon receipt of the mail (from a person other than the manager) at the bank. Moreover, the mail should only be sent to the address as indicated initially and any change thereto should only be made by means of a written request by the client.
- The functions "discretionary management", "management advice" and "execution only" must be clearly separated. The managers should have no doubt whatsoever concerning the nature of the relationship with the clients. The legal documents and internal control system should be adapted to the various situations.
- A complete service of private banking, which can include discretionary management, hold mail accounts and similar services cannot in general be provided in each branch, but only in the centres guaranteeing that they dispose of the equipment allowing to carry out this service accordingly.

Finally, the CSSF insists that the banks lodge complaints against the employees who committed criminal offences.

### 3.13. Fit and proper

The CSSF noted that the scope of the fit and proper principle, pertaining to the professional standing and experience of the persons approved within a supervised entity, as well as the extent of the implications of the approved directorate's joint responsibility is not always perceived. The CSSF thus aims at reminding certain aspects of the nature and scope of these concepts.

Article 7 of the law of 5 April 1993 on the financial sector as amended requires that the members of the board of directors, management and the shareholders or persons with a significant influence over the conduct of business, provide proof of their professional standing, which shall be assessed on the basis of judicial records and any other evidence showing that the persons concerned have a good reputation and show irreproachable conduct.

Further to the criteria of professional standing, the members of management must meet the criteria of professional experience, i.e. they must fulfil indispensable requirements to assume in a professional manner the responsibility of the management of a financial undertaking, such as the fact that they have already carried out similar activities at a high level of responsibility and autonomy.

The criteria of professional standing and experience must not only be fulfilled at the time of the nomination, but also throughout the exercise of the function. Where incidents undermine the trust placed in a person, the CSSF can require his departure.

The professional standing can be called into question due to various situations such as serious non-compliance with regulations and legislation, such as those aimed at combating money laundering, or irregular professional behaviour.

The responsibility of the manager can also be called into question on account of the joint responsibility of the approved directorate. It should be borne in mind that in accordance with the Luxembourg regulations, the members of the directorate approved by the CSSF must have equal powers to determine the bank's goals and are thus responsible for all its activities, even

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for those that have not been directly assigned to them according to the internal organisation chart of the bank. A member of management can thus be led to resign on account of a colleague's dealings. In particular, he can be held responsible for the fact of having tolerated or remained passive in the face of a situation where he should have stepped in and objected to, i.e. for facts in which he was not involved, but for which he is however responsible due to his position within the entity.

### 3.14. Supervision on a consolidated basis

As at 31 December 2003, 33 banks under Luxembourg Law<sup>18</sup> (against 31 in 2002), as well as one Luxembourg-incorporated finance company<sup>19</sup> (idem in 2002) were supervised by the CSSF on a consolidated basis.

The conditions governing submission to a consolidated supervision, the scope, content and methods of supervision on a consolidated basis are laid down in Section III, chapter 3 of the law of 5 April 1993 on the financial sector as amended. The rules in question implement Directive 92/30/EEC on the supervision of credit institutions on a consolidated basis. The practical application of the rules on supervision on a consolidated basis is explained in circular IML 96/125.

It has to be noted that the CSSF pays particular attention to the "group head" function set up at the Luxembourg establishment falling under its consolidated supervision. Thus, the CSSF sees more specifically to the way the Luxembourg parent company communicated its policies and strategies to its subsidiaries as well as to the controls set up at the Luxembourg parent company in order to monitor the organisation and activities of the subsidiaries, as well as their exposures.

The CSSF uses many means to supervise on a consolidated basis:

- The CSSF requires a periodic reporting reflecting the financial situation and the consolidated risks of a group subject to its consolidated supervision.
- Another source of information are the reports prepared by the external auditors. Circular CSSF 01/27 defining the mission of the external auditor requires that a consolidated long form report of a group subject to the consolidated supervision of the CSSF be drawn up. This consolidated report aims at providing the CSSF with an overview of the group's situation and at giving indications on the risk management and structures of the group.
- The CSSF requires for each important subsidiary an individual long form report.
- The CSSF requires that the scope of intervention of the internal audit of the Luxembourg parent company be extended to the subsidiaries in Luxembourg and abroad. By virtue of circular IML 98/143 on the internal control, a summary report on the activities carried out by the internal audit department is to be communicated to the CSSF on an annual basis. This report must mention the controls carried out within the subsidiaries and the results thereof.

<sup>18</sup> ABN Amro Bank (Luxembourg) S.A., Banca Popolare di Verona e Novara (Luxembourg) S.A., Banque Delen Luxembourg, Banque de Luxembourg S.A., Banque Degroof Luxembourg S.A., Banque Générale du Luxembourg S.A., Banque Puilaetco (Luxembourg) S.A., Banque Safra-Luxembourg S.A., BNP Paribas Luxembourg, Commerzbank International S.A., Credem International (Lux), Crédit Agricole Indosuez Luxembourg, Crédit Agricole Investor Services Bank Luxembourg, Danske Bank International S.A., DekaBank Deutsche Girozentrale Luxembourg S.A., Deutsche Bank Luxembourg S.A., Dexia Banque Internationale à Luxembourg, Dresdner Bank Luxembourg S.A., DZ Bank International S.A., Fideuram Bank (Luxembourg) S.A., HSH Nordbank International S.A., IKB International, ING BHF-BANK International S.A., ING Luxembourg S.A., John Deere Bank S.A., Kredietbank S.A. Luxembourgeoise, Natexis Private Banking Luxembourg S.A., Norddeutsche Landesbank Luxembourg S.A., Nordea Bank S.A., Sanpaolo Bank S.A., Société Générale Bank & Trust, UBS (Luxembourg) S.A., West LB International S.A.

<sup>19</sup> Clearstream International

- The information of the CSSF is supplemented by many contacts, exchange of letters and meetings with supervisory authorities of the subsidiaries' host countries. Within the scope of its supervision on a consolidated basis, the CSSF expects to systematically obtain, from the Luxembourg banks subject to consolidated supervision, information on any interventions of the host country authorities with the subsidiaries, where these interventions concern non-compliance with domestic regulations and aspects regarding organisation or risks of these subsidiaries.
- As regards groups with an important network of subsidiaries, the CSSF follows the development of the financial situation and the risks of the subsidiaries included in the consolidated supervision by means of regular meetings with the management of the Luxembourg credit institution under consolidated supervision.

Until now, the CSSF has not carried out itself any on-site inspection at the premises of foreign subsidiaries of Luxembourg banks.

The CSSF also investigates indirect participations of banks subject to its consolidated supervision in accordance with the terms of circular IML 96/125.

### 3.15. International co-operation on matters of banking supervision

The CSSF has concluded memoranda of understanding with the banking supervisory authorities of most Member States of the European Economic Area<sup>20</sup> with a view to specify the terms of co-operation. These memoranda concern in particular the supervision of credit institutions involved in cross-border operations by way of the freedom to provide services or through the creation of branches.

Moreover, in accordance with the legal provisions in force, the CSSF co-operates and exchanges information on an informal basis with a number of its counterpart authorities.

In 2003, the CSSF held three bilateral meetings with various banking supervisory authorities in order to exchange prudential information on institutions under supervision having a presence in both countries.

Alongside the consultations required under European Directives, the CSSF informs the relevant authorities of all significant facts relating to supervision. In particular, it consults the relevant authorities regarding acquisitions of significant participating interests and restructurings of share ownership.

In 2000, the CSSF signed a memorandum of understanding with the Belgian and French authorities relating to supervision of the DEXIA Group. In 2001, a similar agreement, this time relating to supervision of the banking activities of the FORTIS Group, was signed between the CSSF and the Belgian and Dutch authorities.

Following the takeover of the Clearstream group by the Deutsche Boerse AG, the German and Luxembourg authorities signed a memorandum at the beginning of 2004 defining the modes of co-operation between both authorities as regards the supervision of the Clearstream group.

The authorities considered that the new structures of these groups, by introducing a decentralised organisation of operational management units and centres of competence, called for an adaptation of the prudential supervisory modalities to the activities of these groups. The key objective of such a co-operation between authorities is to ensure that all banking activities of these groups are adequately supervised. To this end, the authorities ensure in particular that the various sets of regulations are applied in a harmonised manner in order to avoid any unbalanced treatment within the groups.

<sup>20</sup> Namely Germany, Belgium, Spain, Finland, France, Ireland, Italy, Norway, Netherlands, Portugal, United Kingdom and Sweden.



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The co-operation between authorities is enacted on several levels:

- close consultation between the authorities in order to coordinate and align their prudential supervision;
- continuous and systematic exchange of information on any significant event likely to impact the group or its main constituent entities;
- regular consultation for the principal purpose of updating the list of points requiring the attention of the authorities within these groups, drafting of control plans and, finally, examining the appropriateness of on-site inspections to be carried out by the competent authority in close co-operation with the other relevant authorities.

Besides frequent exchanges of information between persons directly responsible of the supervised entities in each authority, the CSSF attended eleven formal meetings in 2003 within the framework of this co-operation.

The CSSF considers that this new form of co-operation substantially improves the effectiveness of supervision of cross-border banking groups and it is convinced that these can be supervised thoroughly by national authorities collaborating via memoranda of understanding so as to cover all dimensions of a group's activities. This underlines the belief of the CSSF that there is no need for centralised supervision of cross-border groups at EU level.