Leaseurope
267, avenue de Tervuren
B - 1150 Bruxelles
☎ 32-2-778.05.60
Fax 32-2-778.05.79

European Federation of Equipment Leasing Company Associations
Fédération Européenne des Associations des Etablissements de Crédit-bail
Europäische Vereinigung der Verbände von Leasing-Gesellschaften

Mme NOUY

To the attention of
The Basel Committee Secretariat
Basel Committee on Banking Supervision
Bank for International Settlements
CH-4002 BASEL SWITZERLAND

2/2.25/89

Brussels, May 30, 2001

Dear Sirs,

Re: New Basel Capital Accord on Banking Supervision

Leaseurope already sent you on February 20, 2000 its official comments to the "Review of Regulatory Capital Requirement for EU Credit Institutions and Investment Companies".

On January 22, 2001, a Leaseurope delegation headed by Mr. Paoletti, Leaseurope's Vice-Chairman, had a meeting with you personally in Brussels. The present letter and the empirical study on "Leasing Recovery Rates" carried out by the Bocconi University are our initial response. An addendum to this research will be available shortly.

1. Leaseurope believes strongly that the new Accord should pay much more explicit attention to physical collateral, in assessing banks' capital adequacy. This reflects the leasing industry's rights and responsibilities as owners of assets and its experience in managing them. Leaseurope together with the Bocconi University carried out a comprehensive survey with the contribution of their members who supplied data concerning defaulted contracts and recoveries.

2. At this stage, we would simply welcome a recognition in the New Accord of the principle that new asset classes should be added to all approaches, when information of sufficiently high quality is available on them. We seek analogous treatment to that given to project finance in the new Accord or residential property in the current regime.

3. The assets in question can range over the whole gamut of investment goods used by manufacturing and service industries in both the public and private sectors, from ships and aeroplanes through vehicles of all types to office equipment such as photocopiers. In each case the asset finance provider will retain title throughout the duration of the finance agreement, with the usual rights and responsibilities of ownership of goods. These include inspection rights, loan to value ratio assessment, return conditions and the ability to remarket the asset for sale or re-hire. The finance provider will not take any wider security on a customer's assets, since the asset itself can be recovered in the event of default and sold.

4. Many assets have well-established secondary markets, so re-marketing or selling the asset is straightforward. Indeed leasing, where the asset is the subject of two or more finance agreements during its economic life, with one or more customers, is the fastest growing sector in asset finance. It grew by 10% in 2000, the latest year available (178,227 Mio Euro of new business). When compared with consolidated GDP of Leaseurope member countries in 2000, leasing represent 1.9 % of the total and more than 10 % of investments.
Leasing specialists have a good understanding of these secondary markets and of the assets themselves. They are thus first well placed to repossess the asset, and secondly able to maximise the return on its disposal. These aspects combine to give a much lower probability of

loss than a commercial loan, even where the lender may, as is common, have a floating charge.

5. Two major companies, whose business was predominantly in high value or 'big ticket' deals, reported that they had never had a default in many years of doing business. Another has reported that it has had only three defaults in recent years and, in line with our general point on measuring asset security; they reported that the P&L impact might even have been positive compared with the relevant financings going full term.

6. We have not collected comparable data on other forms of finance. But on the face of it the experience of our members that physical collateral gives significant assurance to finance providers is borne out by the data that we have been able to assemble. A wide variety of data is available on some assets: vehicles, many models of aircraft and ships are all well served, in general terms. We plan to investigate these sources' relevance to the present context. We would welcome the opportunity to discuss this further with the Basel Committee, so that both parties can refine our understanding of different asset classes.

7. We believe that leasing has a claim to analogous treatment to that given currently in the EU to residential property. This case is reinforced by the experience of the residential property market in the last recession. Though residential property over long periods tends to appreciate, in contrast to business assets of the kinds financed by Leaseurope members, we believe that this is balanced by the prudent valuations used in leasing and the industry's ability to manage assets.

8. We believe that in the IRB approaches for both Corporate and Retail, the definition of loss given default (LGD) does not take account sufficiently of the circumstances of the leasing industry. It should also include value made from re-leasing of the assets concerned to another lessee.

9. It is vital to get the treatment of small business right. Leasing is a very important tool used to finance SMEs investments. Leaseurope believes that there is a strong risk that the Accord as proposed will discriminate against small and indeed medium-sized enterprises, by making their external finance more expensive or even in shorter supply. Particularly under the standardised approach there will be a pressure on finance providers to increase prices or even exit the SME market altogether. Indeed there seems little incentive to move from that approach to the foundation approach, since additional capital will be required under the latter.

10. We would like to be involved in the further work that the Basel Committee is planning and we would be grateful for an informal meeting at your earliest convenience.

U. RIESE
Chairman

M. PAOLETTI
Vice-Chairman

M. BAERT
Secretary General

SDA BOCCONI
SCUOLA DI DIREZIONE AZIENDALE
DELL'UNIVERSITÀ LUIGI BOCCONI

FIRST REPORT

LEASING RECOVERY RATES

LEASEUROPE – BOCCONI UNIVERSITY BUSINESS SCHOOL RESEARCH

Giacomo De Laurentis – Manuela Geranio

Bruxelles, May 29th, 2001.

1. RESEARCH SCOPE.

This research is aimed at empirically quantifying averages and volatilities of recovery rates in European leasing markets, in order to give the Basel Committee on Banking Supervision useful quantitative information for a fair treatment of leasing under The New Basel Capital Accord. In particular, The Standardised Approach and The Foundation alternative under The IRB Approach require Authorities to take fair decisions for leasing. Leasing markets represent a very important segment of financial system in European Countries. According to Leaseurope estimates, leasing finances about 10 % of global investments in Europe.

EUROPEAN LEASING MARKETS FIGURES – 2000

Country	New leased assets (VAT excluded) Mio €	Global Investments* Mio €	Leasing Share	Representativeness of the National Association
A	4,530	44,766	10%	93,0
B	3,081	31,408	10%	99,0
CH	4,405	27,749	16%	90,0
CZ	2,497	13,487	19%	95,0
D	38,200	436,694	9%	86,0
DK	2,914	37,515	8%	87,0
E	8,489	156,854	5%	88,3
EST	384	922	42%	99,0
F	24,856	275,054	9%	98,0
FI	742	25,138	3%	70,0
H	1,334	13,312	10%	85,0
I	26,742	228,911	12%	95,0
N	1,785	33,469	5%	95,0
NL	3,583	68,500	5%	85,0
P	3,797	28,475	13%	100,0
PL	2,050	40,123	5%	72,0
S	4,894	42,095	12%	90,0
SK	553	16,786	3%	97,0
TUR	1,834	36,414	5%	95,0
UK	39,255	256,354	15%	93,0
Total	175,925	1.814,026	10%	

*Intangible assets and residential property excluded.

Twenty-four Leseurope's affiliates belonging to ten European countries supplied data concerning defaulted contracts and recoveries. Data supplied have been tested for completeness and consistency. The final sample now available (May, 19th) appears to be geographically and typologically concentrated (Italy and leasing with purchasing option).

Countries	Total	% of contracts					
		With purchasing option			Without purchasing option		
		AU	EQ	RE	AU	EQ	RE
Austria	1%	0%	0%	3%	22%	5%	0%
Belgium	13%	32%	3%	3%	0%	38%	0%
Czech R.	2%	6%	0%	0%	0%	0%	0%
Denmark	2%	0%	1%	0%	4%	10%	0%
Spain	1%	1%	0%	0%	0%	0%	0%
Finland	2%	0%	0%	0%	21%	17%	0%
France	3%	5%	3%	0%	0%	0%	0%
Poland	2%	1%	2%	0%	18%	4%	0%
Sweden	7%	3%	4%	0%	36%	26%	0%
Italy	68%	52%	86%	94%	0%	0%	0%
Total	100%	100%	100%	100%	100%	100%	0%
Contracts total number	2120	606	1260	35	107	112	0

As non-Italian data are still in a small number and refer to leasing contracts that are very different in nature (e.g. with or without purchasing option), the research is focused for the time being on the Italian market; some preliminary analysis are reported on two other countries. More data from other countries will soon become available to support this research.

2. RESEARCH METHODOLOGY.

Averages and volatilities of recovery rates are calculated starting from single defaulted leasing contracts, in order to link recoveries, time lags, outstanding debt at default, and some important contractual elements.

A leasing contract is defined as defaulted when the leasing company has unilaterally rescinded the agreement because the lessee has not paid scheduled interest and/or principal. Default doesn't refer to any other interruption of the contract due to other reasons. Time of default is the date of unilateral resolution by the lessor. A leasing contract is defined as charged-off when it is cancelled from accounting books (written off) and there are no other efforts to recover the outstanding credit.

Contracts are chosen, in any single company, starting from the most recently charged-off progressively going backward. Contracts considered are those for which: all required information are available, they can be referred to one asset and one recovery, contracts are drawn under lessor's home country law and are denominated in domestic currency; other contracts have been skipped.

Only recoveries from leased asset sale are considered; recoveries obtained by enforcing other guarantees and/or collateral are not considered. The research objective, in fact, is to define recoveries due to leasing specificity (lessor's ownership of leased asset), apart from guaranties, collaterals and debtors' net worth liquidation.

"Outstanding exposure at default" is defined, if not differently indicated, as rentals expired and not paid (VAT included) plus residual capital not yet expired at default date. Interest on arrears are not considered as well as interest component of rentals not yet expired.

Domestic currencies are exchanged in euros by fixed exchange rates for EMU countries and by market rates on January 2nd 2001 for other countries. Time intervals are calculated between start date and default date, default date and recovery date (if present), default date and charge off date.

3. SAMPLE STRUCTURE.

Italian leasing market represents almost 16% of country's investments (intangible assets and residential property excluded). Sample under examination contains leasing contracts belonging to six Italian leading institutions. All of them declared not to be captive by industrial companies, to be subject to bank supervision and to conform to capital regulation (5 being banks or being consolidated with a bank group, and 1 being subject to special rules stated for other non-bank financial intermediaries). They count for 27.5% of the number of new leasing contracts gathered by Assilea (the Italian Lessors Association) in year 2000 and for 36.5% of new leased asset value (VAT excluded, defined "original value" from now on). Assilea statistical data are expected to represent 95% of Italian leasing market. The six respondents are relatively less involved in automobile leasing (and correspondingly more involved in equipment and real estate segments).

New leasing contracts in year 2000

Company	Automobile		Equipment		Real estate		TOTAL*	
	N. of contracts	Amounts mil. €	N. of contracts	Amounts mil. €	N. of contracts	Amounts mil. €	N. of contracts	Amounts mil. €
Banca Agrileasing Spa	5,860	192	5,544	504	902	550	12,306	1,246
Banca per il Leasing Italease Spa	7,684	242	13,020	1,162	871	640	21,575	2,044
Centroleasing Spa	5,192	210	7,916	453	322	182	13,430	845
Locafit Spa	4,040	133	6,234	507	642	577	10,916	1,217
Locat Spa	26,733	792	15,457	1,394	1,760	1,264	43,950	3,450
San Paolo Leasint Spa	3,169	94	3,597	391	473	341	7,239	827
6 Companies totals	52,678	1,664	51,768	4,411	4,970	3,554	109,416	9,629
ASSILEA totals	221,918	6,281	161,999	10,493	13,266	9,605	397,183	26,379
Coverage of Assilea totals by the 6 companies	23.7%	26.5%	32.0%	42.0%	37.5%	37.0%	27.5%	36.5%

*Airplane and ship segments excluded.

Sample under examination contains 1431 contracts. All of them have been charged off in year 2000 and have purchasing option. Only 12 contracts have a purchasing option price higher than 10% of original value. All contracts are fully pay-out leases.

PURCHOPX	Original value €	Weight %	N. of contracts	Weight %
purchasing price on original value is <=1%	49,719,423	77	1,222	85
1%<purchasing price on original value <=5%	7,166,380	11	174	12
5%<purchasing price on original value <=10%	2,975,846	5	23	2
purchasing price on original value >10%	4,418,601	7	12	1
Total	64,280,250	100	1,431	100

Default years are as follows:

		Original Value	Weight%	Number of contracts	Weight%
DEFAULT YEAR	1984	29,931	0.0	1	0.1
	1985	15,003	0.0	2	0.1
	1986	29,800	0.0	2	0.1
	1987	94,907	0.1	4	0.3
	1988	89,657	0.1	2	0.1
	1989	384,523	0.6	9	0.6
	1990	512,899	0.8	20	1.4
	1991	764,737	1.2	31	2.2
	1992	1,441,076	2.2	34	2.4
	1993	1,783,177	2.8	40	2.8
	1994	2,151,778	3.3	54	3.8

	1995	5,513,774	8.6	103	7.2
	1996	6,770,835	10.5	138	9.6
	1997	7,704,278	12.0	182	12.7
	1998	8,951,337	13.9	234	16.4
	1999	16,979,162	26.4	359	25.1
	2000	11,063,375	17.2	216	15.1
Total		64,280,250	100.0	1431	100.0

The oldest automobile contract was stipulated in 1989, while the oldest real estate contract was in 1992; therefore, the oldest default contracts belong to equipment segment.

Defaulted contracts sample is not stratified by companies activity, as 3 institutions have been able to gather more data than others and it has been preferred to use all of them.

Company Name	Original value €	Weight %	N. of contracts	Weight %
AGRILEASING	4,015,653	6	91	6
CENTROLEASING	15,986,964	25	363	25
ITALEASING	19,332,626	30	487	34
LOCAFIT	4,456,269	7	78	5
LOCAT	17,381,274	27	350	24
SANPAOLOLEASINT	3,107,463	5	62	4
Total	64,280,250	100	1,431	100

Sample distribution among market segments (automobile, equipment and real estate) is as follows:

SEGMENT	Original value €	Weight %	N. of contracts	Weight %
AU	7,365,454	11	313	22
EQ	47,834,362	74	1,085	76
RE	9,080,434	14	33	2
Total	64,280,250	100	1,431	100

Comparison with companies activity (new contracts made in year 2000) and Assilea total estimates of new leasing in year 2000 points out that research sample is relatively more concentrated in equipment leasing: this is compatible with widespread expectations of a greater default probability in this segment.

Original values	Automobile		Equipment		Real estate		TOTAL	
	N. of contracts	Amounts mil. €	N. of contracts	Amounts mil. €	N. of contracts	Amounts mil. €	N. of contracts	Amounts mil. €
6 companies	48%	17%	47%	46%	4%	37%	100%	100%
ASSILEA totals	56%	24%	41%	40%	3%	36%	100%	100%
Research sample	22%	11%	76%	74%	2%	14%	100%	100%

It should also be noted that mean size of automobile, equipment and real estate leasing contracts charged off in year 2000 is lower than average market size of new contracts for the same segments: probably, different contracts start time only partially explains these differences that seem coherent with expectations of a greater default probability in smaller size contracts.

Average original values

	AU	EQ	RE	Total
6 companies	31,585	85,213	715,118	88,006
ASSILEA totals	28,302	64,772	724,030	66,415
Sample	23,532	44,087	275,165	44,920

Contracts distribution in number and in value (original value) according to leasing period and original value shows the expected concentration.

Sample distribution per leasing period

Per cent	AU		EQ		RE		Total	
	Orig.value	Contracts number	Orig.value	Contracts number	Orig.value	Contracts number	Orig.value	Contracts number
leasing period is <=37 months	53	70	8	17	0	0	12	28
37 months<leasing period<=49 months	17	14	16	24	0	0	14	21
49 months<leasing period<=61 months	30	16	59	47	0	0	47	39
leasing period is >61 months	0	0	16	13	100	100	26	12
	100	100	100	100	100	100	100	100

Sample distribution per original value

Per cent	AU		EQ		RE		Total	
	Value	Contracts number	Value	Contracts number	Value	Contracts number	Value	Contracts number
original value is <= €25,000	48	74	15	50	0	0	17	54
€25,000<original value<= €50,000	24	17	21	25	2	9	18	23
€50,000<original value<=€500,000	28	8	60	24	60	82	56	22
original value is >€500,000	0	0	4	0	38	9	9	0
Total	100	100	100	100	100	100	100	100

4. TIME LAGS.

Leasing contracts default date is, on average, 38 months after contract start. For different market segments lags are: 31 months for automobile, 40 months for equipment, 53 months for real estate. Lags are strongly related to typical leasing period of different market segments. Sample distribution is as follows (23, 35 and 50 months are upper boundaries of 25th, 50th, 75th percentiles calculated on total sample contracts numbers):

Start date to default date

Per cent	AU		EQ		RE		Total	
	Orig.value	Contracts number	Orig.value	Contracts number	Orig.value	Contracts number	Orig.value	Contracts number
<= 23 months	29	28	22	23	11	15	21	24
>23 and <=35 months	33	35	18	21	10	15	19	24
>35 and < = 50 months	24	26	27	27	10	15	24	27
> 50 months	13	11	33	29	69	55	36	25
	100	100	100	100	100	100	100	100

To take into account both default to contract start lags and contract structures the following indicator is used: outstanding at default over original value. Overall mean and median are about 48%; averages for automobile is 42%, 49% for equipment, 68% for real estate. In any market segment, sample contracts (in number and in outstanding value) are almost equally distributed, according to outstanding at default over original value, in four groups defined by the upper boundaries of 25th, 50th, 75th percentiles calculated on total sample contracts numbers. Only for the 25th percentile in automobile and real estate segments there are significantly different results.

Outstanding at default over original value

Per cent	AU		EQ		RE		Total	
	Orig.value	Contracts number	Orig.value	Contracts number	Orig.value	Contracts number	Orig.value	Contracts number
Outorv <=19%	31	33	19	23	5	9	19	25
19%< Outorv <=48%	21	24	27	26	41	12	28	25
48% Outorv <= 72%	27	23	28	25	27	33	28	25
Outorv > 72%	21	20	25	26	27	45	25	25
	100	100	100	100	100	100	100	100

Legend: Outorv is outstanding at default over original value.

Recovery to default lag is 16 and 17 months in automobile and equipment segments; it is less then 3 years for real estate. Even if not directly comparable, leasing time to recovery appears somewhat shorter than time to recovery in Italian bank loans market indicated in Generale A. Gobbi G., *Il recupero dei crediti: costi, tempi e comportamenti delle banche*, Temi di Discussione, Bank of Italy, 1996.

RECOVERY DATE TO DEFAULT DATE LAG, months

	Mean	Std. Dev.	N. of contracts
AU	16	21	258
EQ	17	19	780
RE	35	30	33
Total	17	20	1,071

For real estate, difficulties are probably related more to getting back the asset than to resell it. It also appears that recover lags are even lower in most European countries, both in automobile segment (where only for 6 contracts from a Polish company over 400 contracts from non-Italian companies there is an higher figure) and in equipment segment (where only for 9 contracts from a Spanish company over 287 contracts from non-Italian companies there is an higher figure).

5. RECOVERY RATES.

Many different measures of average recovery rates have been calculated.

RRNOM	(Simple) average recovery rates (un-weighted and un-discounted): it is the mean of single contracts recovery value over outstanding at default
RRNOMCST	Average constrained recovery rates: each recovery exceeding outstanding at default is constrained to outstanding at default value before single contract recovery rate is calculated. Constrained rates are calculated because, in Italy, if recovery is higher than outstanding at default (plus interest on arrears and legal expenses refund) lessors have to pay the difference to lessees
RRDIS3	Average discounted at (yearly compounded) 3% recovery rates: it is recovery value / (1+0.25%)^deftorec / outstanding at default; deftorec is default date to recovery date interval in month; 0.25 is the rounded monthly rate equivalent to yearly compounded 3% rate
RRDIS6	Average discounted at 6% recovery rates
RRDIS12	Average discounted at 12% recovery rates

RRDIS18	Average discounted at 18% recovery rates
RRCDS3	Average discounted at 3% constrained recovery rates
RRCDS6	Average discounted at 6% constrained recovery rates
RRCDS12	Average discounted at 12% constrained recovery rates
RRCDS18	Average discounted at 18% constrained recovery rates
WRRNOM	Weighted average recovery rates (contract outstanding at default / total outstanding at default is the weight of single contracts recovery rate; weighted average rates equal total recoveries over total outstanding)
WRRNOMCS	Weighted average constrained recovery rates
WRRDIS6	Weighted average discounted at 6% recovery rates
WRRCDS6	Weighted average discounted at 6% constrained recovery rates

Discounting recoveries at default date rather than capitalizing outstanding debt at charge off date has been preferred because of inappropriate resulting underestimation of "economic" recovery rates implied by the latter procedure that, on the other hand, appears to be closer to the "accounting" perspective.

Interest on arrears (and other expenses invoiced to lessees) prior to default have not been considered, because of different policies followed by different lessors and simplicity needs in data collection process. Implied recovery rates overestimation is at least partially balanced when "constrained recovery rates" are considered. To check for interest on arrears effect, a test performed on more than half the Italian sample (as number of contracts, coming from 2 lessors) has shown that adding interest on arrears to outstanding at default decreases simple and weighted average recovery rates, respectively, of about 13% and 9% if un-constrained cases are considered, and of 8% and 6% if constrained cases are taken into account (decrease is in percentage of without-interest-on-arrears rates, and not in absolute terms) .

Discounted recovery rates take into account time value between default and recovery dates.

It is necessary to remember that only recoveries from leased asset sales are considered, so that actual global recoveries are higher than those here examined, thanks to bank-style guaranties/ collaterals and/or to liquidation of debtors' net worth.

Analysing un-weighted measures of mean and standard deviation, recovery rates are as follows:

Per cent	AU		EQ		RE		Total	
	Mean	StdDev	Mean	StdDev	Mean	StdDev	Mean	StdDev
RRNOM	85	223	51	116	122	59	60	146
RRNOMCST	57	40	39	39	91	22	44	41
RRDIS3	81	203	49	109	113	58	58	135
RRDIS6	78	184	47	103	105	57	55	125
RRDIS12	72	153	44	93	93	58	51	110
RRDIS18	67	129	41	87	83	59	48	98
RRCDS3	56	39	37	38	84	21	42	39
RRCDS6	54	38	36	37	78	22	41	38
RRCDS12	51	37	34	35	68	26	38	36
RRCDS18	49	36	32	34	60	29	36	35
Constrained Vs uncons. decrease	33%	82%	24%	66%	26%	64%	27%	72%

Both (simple) average recovery rates and standard deviations are quite high: for real estate, mean is over 100%.

Average constrained recovery rates decrease is almost 33% for automobile due to frequency and size of recoveries higher than "outstanding at default"; this situation also is quite frequent in equipment and real estate segments. Standard deviation decrease between unconstrained and constrained perspectives is considerable (82%, 66%, 64% and 72%, respectively for AU, EQ, RE and total): for real estate constrained recovery rates standard deviation is always lower than in other segments, to indicate a lower recovery risk.

Of course, average discounted recovery rates become lower as discount rates increase: however, decrease is relatively smaller for automobile and equipment segments and relatively higher for real estates, due to different time lags between recovery and default.
Standard deviation decreases as discount rates increase: that is to say that if time value is higher, both average discounted recovery rates and volatility of losses are reduced. For unconstrained discounted recovery rates standard deviation is smaller in real estate segment, to signify that dispersion of recovery rates is more limited.

As discount rates rise, decrease in average discounted constrained recovery rates is much lower than for unconstrained rates; also standard deviations move slowly. In the worst real estate case, with a yearly compounded 18% discount rate, constrained recovery rate is still 60% and standard deviation is at a relatively low level of 29 percentage points. This is because there is room in recovery values

to balance higher interest requirements, so that many constrained rates are still at 100% even if higher discount rates apply.

An analysis by original value contract size is now presented.

Per cent

Segments	Groups	Mean					Std Deviation				
		A	B	C	D	Total	A	B	C	D	Total
AU	RRNOM	82	113	56		85	233	231	41		223
	RRNOMCST	55	68	55		57	41	38	39		40
	RRDIS3	79	107	55		81	213	204	40		203
	RRDIS6	75	102	53		78	195	181	40		184
	RRDIS12	70	92	51		72	163	142	39		153
	RRDIS18	65	84	49		67	138	113	38		129
	RRCDS3	54	66	53		56	40	37	39		39
	RRCDS6	52	64	52		54	39	36	38		38
	RRCDS12	49	60	50		51	38	35	37		37
	RRCDS18	47	57	48		49	37	34	37		36
EQ	RRNOM	45	67	47	79	51	102	172	50	49	116
	RRNOMCST	35	42	43	72	39	39	40	39	40	39
	RRDIS3	44	63	45	79	49	98	159	47	50	109
	RRDIS6	42	60	44	78	47	93	149	45	50	103
	RRDIS12	39	56	41	77	44	86	134	42	50	93
	RRDIS18	36	52	39	76	41	80	124	40	51	87
	RRCDS3	34	40	41	71	37	38	38	37	41	38
	RRCDS6	33	39	40	70	36	36	37	36	41	37
	RRCDS12	30	36	38	69	34	34	36	35	41	35
	RRCDS18	29	34	36	68	32	33	34	34	42	34
RE	RRNOM		110	115	200	122		57	46	127	59
	RRNOMCST		86	90	100	91		21	23	0	22
	RRDIS3		100	106	190	113		59	42	133	58
	RRDIS6		91	98	181	105		60	39	139	57
	RRDIS12		76	86	166	93		61	39	148	58
	RRDIS18		64	77	154	83		61	40	154	59
	RRCDS3		77	84	92	84		22	22	7	21
	RRCDS6		68	78	85	78		24	23	13	22
	RRCDS12		55	69	74	68		27	27	22	26
	RRCDS18		45	62	65	60		29	29	29	29
Total	RRNOM	56	75	54	140	60	154	183	52	109	146
	RRNOMCST	41	47	48	86	44	41	41	40	30	41
	RRDIS3	54	71	51	134	58	143	167	49	109	135
	RRDIS6	52	67	49	129	55	133	154	47	109	125
	RRDIS12	48	62	46	121	51	116	135	43	110	110
	RRDIS18	45	57	43	115	48	102	122	41	111	98
	RRCDS3	40	45	46	82	42	39	39	38	28	39
	RRCDS6	38	43	44	78	41	38	38	37	28	38
	RRCDS12	36	40	41	72	38	36	36	36	30	36
	RRCDS18	34	38	39	67	36	35	35	34	32	35

Legend
A original value is <= 25,000€
B 25,000<original value<= 50,000€
C 50,000<original value<=500,000€
D original value is >500,000€

Considering constrained discounted recovery rates in equipment and real estate segments, higher rates are obtained for bigger contracts; in real estate segment, these contracts also present a lower standard deviation. In automobile segment, leased assets ranging between € 25,000 and € 50,000 have the best average recovery rate and the smallest standard deviation. Differences are not trivial.

Coming now to examine weighted average recovery rates, for the total sample they are higher than (simple) average because real estate contracts weight more than automobile when values are considered. Constrained rates are similar to corresponding (simple) average rates for all market segments. Simple and weighted unconstrained nominal rates comparison presents a more diversified picture, to signify that in this case simple means are strongly affected by outliers with high recovery rates.

	AU		EQ		RE		Total	
Per cent	Mean	StdDev	Mean	StdDev	Mean	StdDev	Mean	StdDev
WRRNOM	59%	51%	41%	45%	150%	92%	61%	69%
WRRNOMCS	55%	37%	39%	37%	92%	19%	49%	40%
WRRDIS6	56%	47%	39%	42%	132%	96%	56%	65%
WRRCDS6	52%	35%	36%	35%	78%	21%	45%	36%

For a better understanding of leasing specificity, it is useful to note that expected loss rate is:

probability of default x loss given default

that can be rewritten as follows:

PD x (1-recovery rate)

and, then:

PD x (1 - probability of recovering x average amount recovered if any recover occurs).

In an ex post perspective, average recovery rate is equal to frequency of recovery (FR) multiplied by "average recovery rate on defaulted contracts with recoveries" (RRWR). That is to say:

$$\text{average recovery rate} = FR \times RRWR$$

For the examined sample, results are as follows.

	Automobile	Equipment	Real estate	Total
Contracts with recovery	258	780	33	1071
Contracts without recovery	55	305	0	360
Total	313	1085	33	1431
FR	82%	72%	100%	75%
RRNOMWR	103%	71%	122%	81%
RRNOMWRCST	70%	54%	91%	59%
WRRNOMWR	66%	52%	150%	72%

Legend
FR, frequency of recovery
RRNOMWR, as RRNOM but limited to With Recovery cases
RRNOMWRCST, as RRNOMCST but limited to With Recovery cases
WRRNOMWR, as WRRNOM but limited to With Recovery cases; note that for this ratio doesn't hold that WRRNOM = FR x WRRNOMWR

This analysis points out the relevant role of "probability of recovery", usually neglected in academic and applied studies. Frequency of recovery based on leased asset sale is quite high: in real estate segments FR is 100%. Also recovery rates calculated only on "with recovery cases" aré very high, not only for real estate but also for other segments, even from the constrained rates perspective.

Here calculated frequencies of recovery are underestimate (above all for automobile segment) because recovery from insurance companies in case the asset is disappeared are not considered.

In The New Basel Capital Accord there is a specific definition of default; among considered events, there is that "the obligor is past due more than 90 days on any credit obligation". Proposed default

definition is going to increase both frequency of defaults and recovery rates. It will be important to realize that FR is going to upraise as well as RRWR, greatly changing historical values.

6. BELGIUM AND SWEEDEN.

For the time being, some preliminary results for Belgian and Swedish markets can be presented.

Belgian leasing market represents about 10% of country's investments (intangible assets and residential property excluded). Sample under examination contains automobile leasing contracts with purchasing option belonging to 2 leading institutions. Both of them declared not to be captive by industrial companies, to be subject to bank supervision and to conform to capital regulation. The sample contains 191 contracts: 89.5% of contracts belong to one company.

Recovery rates are as follows:

	Contracts number	Mean %	Standard deviation %
RRNOM	191	101	65
RRNOMCST	191	85	17
RRDIS6	191	100	65
RRCDS6	191	84	17
WRRNOM	191	86	31
WRRNOMCS	191	81	17

Note that:

1) outstanding at default is defined as residual capital not yet reimbursed at time of default (capital payments already expired and not paid plus residual capital not yet expired at default date);
2) the company that supplied 20 contracts declared that it did not send data on all charged off contracts, from some recent time backward, matching stated "general rules" and including contracts for which nothing was recovered, as was instead declared by the company that supplied 171 contracts,
3) there are no contracts without recovery in the whole sample,
4) average recovery rates are very similar for the two companies; standard deviation is almost equal to the overall sample value for the company that supplied 171 contracts while it is much smaller for the other company,

5) constrained rates have not particular meaning because both companies declared that they take the whole amount of assets sales in case of default, even if it is higher than "outstanding at default" plus interest on arrears and legal/operating costs of recovery,
6) average recovery to default lags are very short (2.81 and 2.7 months for the two companies), so that discounted rates are very close to nominal rates.

In conclusion, if Belgian automobile leasing with purchasing option average recovery rates are prudentially compared with Italian rates calculated on the "with recovery" sub-sample, they appear similar to those reported on the six-Italian-company sample. In fact, as Belgian companies take the whole amount of recovery, while Italians don't, 15 percentage points difference in constrained rates probably balance different "outstanding at default" definition.

Swedish leasing market represents almost 12% of country's investments (intangible assets and residential property excluded). Sample under examination contains leasing contracts belonging to 3 leading institutions. All of them declared not to be captive by industrial companies, to be subject to bank supervision and to conform to capital regulation. These three companies represented about a quarter of new leased asset value in Swedish market in 1999.

Averages and volatilities of recovery rates that follows are only indicative, because of the small number of observations and because of some misalignment of input data on which we are still working on. Therefore, any interpretation is avoided except that figures are broadly compatible with those calculated for Italian and Belgian markets.

	AU			EQ		
	Contracts number	Per cent		Contracts number	Per cent	
		Mean	Std Deviation		Mean	Std Deviation
WITH PURCHASING OPTION						
RRNOM	20	62	27	53	53	29
RRNOMCST	20	61	26	53	53	29
RRDIS6	20	60	26	53	52	28
RRCDS6	20	60	25	53	52	28
WITHOUT PURCHASING OPTION						
RRNOM	38	88	16	29	66	41
RRNOMCST	38	86	14	29	64	38
RRDIS6	38	86	16	29	65	41
RRCDS6	38	84	14	29	63	38

7. CONCLUSION

Taking into account that here examined recovery rates come exclusively from leased asset sales, it is apparent that leasing industry recovery rates are quite high whatever measure is considered. Preliminary analysis on other than Italian data suggests that recovery rates are even higher than those presented for Italy both in automobile and equipment segments (it is necessary to consider that in many countries lessors take the whole amount of recoveries, even if higher than outstanding at default plus interest on arrears and legal expenses refund, so that constrained recovery rates certainly greatly underestimate actual recoveries).

PURCHASING OPTION		RRNOM	RRNOMCST	RRDIS6	RRCDS6
No	Mean	70	69	69	68
	N	219	219	219	219
	Std. Deviation	32	30	32	30
Yes	Mean	161	71	156	69
	N	470	470	470	470
	Std. Deviation	608	33	591	33
Total	Mean	132	70	129	69
	N	689	689	689	689
	Std. Deviation	504	32	490	32

SEGMENT		RRNOM	RRNOMCST	RRDIS6	RRCDS6
AU	Mean	145	77	142	75
	N	400	400	400	400
	Std. Deviation	508	27	493	27
EQ	Mean	115	61	110	60
	N	287	287	287	287
	Std. Deviation	501	37	488	36
RE	Mean	95	95	91	91
	N	2	2	2	2
	Std. Deviation	8	8	10	10
Total	Mean	132	70	129	69
	N	689	689	689	689
	Std. Deviation	504	32	490	32

It is probable that this higher figures come from higher frequency of recovery and from higher recovery rates on defaulted contracts with recovery.

In view of all these evidence, it is, therefore, important that the Basel Committee fully evaluates what leasing "asset based lending features" imply, in comparison to bank loans, for a fair treatment under The New Capital Accord.

Mr. John F. MOGG
Director General
Internal Market DG
European Commission
Rue de la Loi 200
B-1049 Bruxelles

2/2.25/89/COE02241
MS/AV

Brussels, February 20, 2000

Dear Mr. MOGG,

We have the honour and pleasure to enclose the official comments of LEASEUROPE to 'The Review of Regulatory Capital Requirement for EU Credit Institutions and Investment Firms', as requested in the 'consultative process' of the consultation document.

Leaseurope is the European Federation of Equipment Leasing Company Associations, with currently 25 National Members Associations covering more than 1000 individual leasing companies in Europe.

We hope that you find our comments useful and at the same time acceptable for further steps in the process for a new action plan for the 'Implementation of a New Regulatory Capital Requirement Framework in the European Union'.

Yours sincerely,

Mathias SCHMIT
(Consultant)

Marc Baert
(Secretary General)

c.c. Mr. Campogrande - European Commission
Mr. William McDonough – Basel Committee on Banking Supervision
Mr. Norgren – European Commission and Basel Committee on Banking Supervision

Position Paper of LEASEUROPE on the Consultative Paper issued by the European Commission on the Review of Regulatory Capital Requirements - November 1999

I. Introduction

Leaseurope is the European Federation of Equipment Leasing Company Associations, based in Brussels. It presently represents 25 National Member Associations covering more than 1000 individual leasing companies in Europe.

Lease finance provides a significant source of funds to companies enabling them to acquire assets. The market penetration, which measures the share of equipment expenditure financed by leases, differs greatly from country to country; it can exceed 30 %, as in Ireland according to the last Leaseurope's annual report. According to Leaseurope's estimates for 1999, 133 billion euros were engaged in new lease contracts in 17 European countries[1] in 1998.

Leaseurope, which represents a key-player industry as a provider of funds, is delighted to submit its reaction to the proposal concerning capital requirements.

Leaseurope welcomes the EU proposal to review the regulatory capital requirements in the EU, which refines the way capital requirement reflects risks. The Federation is aware that it is essential to set high standards for prudential regulation of capital requirement in order to achieve financial services stability in a global market.

Nevertheless, the Federation would like to raise some concerns regarding the new proposal. This Position Paper will clarify the views shared by the Federation, which deals in many areas of financial services. These views result from discussions within our industry representing companies of all sizes.

---

[1] The countries taken into account are the Czech Republic, Hungary, Poland and all the EU countries except for Greece.

Our position paper will comment the following points:

- Application for a Specific Industry
- Standardized Approach versus Internal Approach for Capital Requirement
- Mitigation Techniques
- Treatments of Other Risks (operational, legal and reputational risks)
- Conclusions

II. Application for a Specific Industry

Until now, many financial companies in European countries – even if not formally considered as 'banks'- are subjected to strict Central Bank Supervision. It would be discriminatory and illogical to continue to apply the same risk weighting proposed for corporations to these financial companies when they are looking for funds. In this respect, they should be weighted with the criteria used for banks.

III. Standardized Approach versus Internal Approach

The Federation shares the view of the EU that external ratings were set for international banking activities and that few companies are rated in the EU. In this context, the Federation cannot sustain the exclusive use of external ratings. It would also like to stress the following points.

Problems resulting from external ratings

Institutions dealing with non-rated companies would be discriminated against others with the standardized approach. In addition, the Federation would like to stress that with such an approach, an unjustified market power will be given to rating agencies, especially American agencies that operate in an oligopolistic structure. This situation will generate competitive disadvantages for European countries where the rating system is not widely used.

The weighting proposed for non-rated companies is 100 % and does not take into account the real risk of credits. As far as the use of external rating is concerned, considering that very few companies are rated, a 150% weighting applying to the lower rated corporate entities would be discriminatory for these companies, when compared with the 100 % weighting applied to a large number of non-rated corporate entities.

For small and medium-size companies, a default weighting is set at 100 %, as they are not rated. This standardized approach would be detrimental to these non-rated companies, because it would result in an increase of their financing costs. The Federation cannot accept such consequences. In addition, one must note that these consequences are not consistent with the EU policy promoting the creation of small and medium-size companies.

Specificity of entities

Another argument in favour of the internal approach is its flexibility; hence, the specificity of sectors or industries can be taken into account when calculating capital requirements.

Moreover, the Federation would like to stress that the leasing industry has generally a very good understanding of secondary market for assets and thus of residual value for leased assets. This is a substantial advantage and it has to be taken into account when calculating capital requirements.

Regarding the credit risk, the Federation stressed that the comprehensive knowledge of our specific market, the scoring techniques and expert systems are a form of competitive advantage for specialized businesses. Therefore, these techniques should be promoted.

Complexity

The Federation is also concerned about the potential complexity of implementing the proposal. It is aware of the costs and benefits of the proposed reforms for the various types of businesses and of the application of the new proposal for smaller corporate entities. The latter will be put at a disadvantage in terms of competition.

Therefore, the Federation invites the Commission to take into account the fact that the implementation of such an important reform need to be tailored according to business specificities and the size of the various corporate entities. In accordance with the Basel Committee, the proposal should be suitable for application to institutions of *varying levels of complexity and sophistication*. The Federation favours the internal approach and believes that practices for sound risk management need to be examined.

IV. Mitigation Techniques

Leaseurope would like to stress that mitigation techniques should be recognized and used for leasing financing. Also, in terms of risk on residual value, one can grant risk according to asset types. Also, leasing should be treated in accordance with the nature of the business. The major specificity of lease financing, when compared to other forms of financing, is that the lessor remains the legal owner of the leased asset during the entire life of the contract. This should be taken into account, especially for specific kinds of assets like cars, real estate, planes, etc.... In addition, it should be stressed in these circumstances, that a lessor would suffer losses only if the lessee defaults and if the leased asset suffers from unexpected depreciation. It is unlikely that these defaults occur simultaneously, as one can expect a low correlation between lessee default and losses on residual value. This has to be reflected when calculating capital requirements and leasing should be explicitly recognised as a safe financing technique.

Real Estate Leasing

The EU document does not explicitly mention the weighting of loans secured by property. However, according to point 6 of Annex 2 of the Basel Committee's document, a 100 % weighting is proposed for mortgages on commercial real estates and 50 % for fully secured loans on residential property. Lacking any specific reference to leasing, these contracts will be treated as mortgages and consequently weighted at 100 %. The Federation agreed that such an approach is too radical and the risk of the asset should be taken into account such as the asset place, type, etc...

Under these circumstances, the Basel Committee's Document would introduce a weighting system which is different from that indicated for leasing contracts in the Directive 98/32/EC of June 22, 1998, which confirmed the precedent set by Council Directive 89/647/EEC on a solvency ratio for credit institutions. According to this Directive '*Member States may apply a 50% risk weighting to property leasing concluded before December 2006 and concerning assets for business use situated in the country of the head office and governed by statutory provisions whereby the lessor retains full ownership of the rented asset until the tenant exercises his option to purchase. Member States shall inform the Commission of the use they make of this paragraph*'.

Therefore, regarding real estate leasing weighting, the New Capital Adequacy Framework contrasts with the latest information received from the European Commission, and, if approved would lead to a 100 % risk weighting for real estate leasing transactions. Presumably, the Basel Committee has had unpleasant experiences with loans mortgages that are uncommon in European Countries involved in real estate leasing transactions. Several reasons sustained this fact:

- Firstly, in a leasing contract the lessor is the legal owner of the real estate and is not a receiver of a guarantee;

- Secondly, leasing companies do not have a speculative approach and thus buy real estate only after entering into a leasing contract with a lessee;
- Thirdly, because lessees who take real estate are normally not engaged in the real estate business and are only interested in the use of the real estate for their specific business; therefore, they are not particularly vulnerable to fluctuations in real estate market and
- Finally, because the market value of real estate leased is generally higher than the residual financial value, the potential resale price does almost always cover all unpaid lease rentals.

Hence, the Federation would appreciate if these points were taken into account in the proposal (no weakening of Council Directive 89/647/EEC). In addition, one can notice that the Council Directive 89/647/EEC has shown its strength since its implementation and thus does not need to be revised, as it is implicitly claimed in the Basel Paper. Moreover, the Federation would like to mention its astonishment with regard to some corporate loans being weighted at 20 % while real estate leasing is weighted at 100 % or 50 %.

V. Treatment of other Risks

The EU proposal takes into account operational, legal and reputational risks.

To measure operational risks, the EU would take income and size as proxies for operational risks. This approach seems rather difficult because of the problems raised in terms of its application. Among others, it is well known that the size effect is very difficult to interpret. This point is supported by several academic researchers[2].

[2] See for example Lasfer A. and Levis M., 'The determinants of the leasing decision of small and large companies', European Financial Management, Vol. 4, No. 2, 1998, pp. 160.

The Federation is reluctant to endorse such an approach and would like these points to be further developed. In addition, the Federation believes that this type of approach is too arbitrary and that it would be difficult to implement without any distortion. The Federation supports the idea that other risks should be controlled by adequate techniques rather than additional capital requirements that would not in any case resolve the problems linked to them. In that sense, the Federation would refer to internal control practices where the goals are, among others, the control of the company environment (which includes ethical value, competence of people...), its risk assessment and the control of its activity.

VI. Conclusions

Although the Federation agrees on the concept that capital requirement should be based on risk incurred by credit institutions, it is concerned with the following points:

- A new proposal should not generate distortions among the market players, especially small and medium size companies. In this regard, the Federation draws the Commission's attention to the fact that some aspects of its proposal should be reviewed, especially the standardized approach. The Federation is also concerned about the potential complexity for small businesses of implementing the proposal. It is crucial to evaluate the cost of such measures for small entities and the impact on the market.

- The Commission should make sure that the implementation of its proposal would not generate competition problems, i.e. potential power of the current rating agencies in the oligopolistic market they operate in. European companies would face an increased level of competition due to the quasi absence of European rating agencies. In that area, the Commission should take all the precautions required for the monitoring and selection of rating agencies, which is not the case currently.

- The Federation concludes that the new proposal should take into account and recognize the specificity of each business. In that sense, the Federations strongly support the internal approach.

- The Federation welcomes the mitigations techniques put forward and would like to stress that the specific requirements of our industry (high mitigation for leasing financing, especially on real estate leasing transactions) must be taken into account.

- Also, the Federation would like to stress that capital requirement is not the only way to contain risks and suggest the promotion of internal control, especially regarding the treatment of other risks in the proposal.

The Federation is aware of the complexity of the issues raised but believe that further analysis is needed and that it is crucial to focus on European market specificities. In light of the above, the Federation is pleased to submit their comments and hope they will contribute to the debate and to an improved proposal.