

## **ANNEX**

**Example : Weightings table**

This table is shown as an example. Indicative relative weighting levels are given ('+' corresponds to the lowest weighting, '+++++' corresponds to the highest weighting).

We will leave the definition of the weightings to the Regulator.

		Weightings to be applied to market value				Weightings to be applied to book value			
		Listed equity		Private equity		Listed equity		Private equity	
		Rating >=BBB-	Rating <BBB-	Rating >=BBB-	Rating <BBB-	Rating >=BBB-	Rating <BBB-	Rating >=BBB-	Rating <BBB-
<b>Classical equity holdings</b>	Control (more than 50% shareholding)	+++++	+++++	+++++	+++++	+++	+++	+++	+++
	Reference shareholder	+++	++++	++++	+++++	++	+++	+++	+++
	Minority shareholder – significant financial or strategic involvement	++	+++	+++	++++	++	++	++	+++
	Minority Shareholder – long term investment	+	++	++	+++	++	++	++	+++
	Minority shareholder – short term investment	+	+	++	++	+	+	+	++
	Seed Capital Venture Capital Small Company Investments	+++++				+++			
<b>Particular equity holdings</b>	LBO – sponsor	+++++				+++			
	LBO – participant	++++				++			
	Portage	+				+			

Note : >=BBB- is investment grade rating  
<BBB- is non investment grade rating

## Annex II – FINANCIAL LEASING

### *Annex II.a*

## LEGAL FRAMEWORK FOR FINANCIAL LEASING

In France, financial leasing services are provided by credit institutions, which tend to be specialists. Financial leasing is considered as a form of credit under article L 313-1 of the French Monetary and Financial Code. As a result, these activities can only be carried out on a regular basis by credit institutions that are monitored by supervisory bodies and subject to specific prudential requirements.

At end-December 2000, there were a total of 171 financial leasing companies in France: 72 specialising in equipment leasing, 83 property leasing companies and 16 'SOFERGIE' companies (funds for energy-efficient investments in industry).

### **1) Definition of financial leasing transactions**

Article L 313-7 of the French Monetary and Financial Code defines equipment leasing and property leasing transactions.

The transactions covered by this article are as follows:

- 2) *“Leasing transactions involving plant and machinery acquired specifically for such leasing purposes by companies, which maintain ownership of these assets. These transactions, however they may be termed, should give the lessee the option of acquiring all or part of the assets leased, subject to payment of an agreed price which takes into account at least a proportion of the lease payments already made;*
- 2) *Transactions whereby a company leases out properties it has acquired or built for professional usage. These transactions, however they may be termed, must enable lessees to take ownership of all or part of the leased properties before the lease expiry date, either by: i) executing a ‘unilateral sales commitment’; ii) directly or indirectly acquiring ownership rights to the land on which the leased properties have been built; or iii) legally transferring ownership of the buildings built on the land owned by the said lessee.”*

Based on these definitions, there are three basic and interrelated characteristics that identify a financial leasing contract from a legal viewpoint:

- The contract involves a **leasing transaction**, whose duration generally coincides with the useful life of the asset.
- The transaction involves **equipment or property intended for professional usage**.
- The contract is accompanied by a **‘unilateral sales commitment’**.

Financial leasing transactions are arranged in such a way that the lease payments and purchase option price enable the lessor to recover the total principal value of the asset plus a sufficient margin to cover its own refinancing costs, the cost of the risk, its overheads and its profit. The purchase option price is determined such that the lessor can recover its investment by reselling or re-leasing the asset if the lessor does not take up the purchase option.

.../...

In addition to the financial leasing transactions described above, credit institutions may also offer:

- Leasing contracts with purchase options intended for consumers. These transaction are similar to financial leasing operations, but involve a different beneficiary (e.g. private vehicle hire purchase schemes offered to consumers);
- Straightforward leasing transactions, which do offer the lessee a purchase option but share other common features with financial leasing contracts. The initial investment is recovered through the lease payments made over the duration of the contract plus the resale price of the asset at the end of the contract, particularly if the original supplier undertakes to repurchase the asset.

## **2) Parties involved in the transaction**

A financial leasing agreement involves three parties: the supplier, the lessee and the lessor.

The lessee can freely choose the equipment it requires for its business. This equipment is delivered by the supplier once the lessor has purchased it. The lessor maintains ownership of the asset throughout the duration of the contract, while the lessee is entitled to keep the asset in return for a regular lease payment. At the end of the contract, the lessee can continue leasing the equipment, return it or purchase it according to the terms of the agreement.

## **ASSET OWNERSHIP AND IMPLICATIONS**

In a financial leasing transaction or straightforward leasing arrangement, the **fundamental guarantee** for the lessor is the fact that it **maintains ownership** of the asset for the duration of the contract, or until the purchase option is exercised (in the case of a financial leasing contract). The fact that the lessor has full ownership rights over the leased asset provides it with far more protection in its dealings with lessees and creditors<sup>1</sup> compared with standard guarantees.

In the event of a default, the contract may be terminated without referral to the courts as the terms of the agreement stipulate that the contract can be legally declared null and void if the lessee fails to meet its obligations, particularly in terms of lease instalments. The lessor can subsequently recover the asset and sell or re-lease it to pay off the outstanding balance due. If the lessee fails to return the asset under amicable terms, the lessor can initiate recovery proceedings (for equipment) or eviction proceedings (for property) following an urgent ruling from the court.

In addition, a penalty clause in the contract requires the lessee to pay a large indemnity for breach of contract, which discourages lessees from prematurely terminating the agreement.

In the event of collective recovery or liquidation proceedings against the lessee, the lessor's rights are upheld:

- The lessor must be personally informed that the proceedings have been initiated, otherwise the lessor cannot be debarred from claiming lease payments prior to the start of proceedings due to lack of sufficient warning;
- If the contract is not extended by the receiver, the asset must be returned to the lessor;
- If the contract is extended by the receiver, the latter must ensure that it has sufficient funds to pay the further lease instalments resulting from the extension;
- If no more lease payments are made, the contract may be terminated and the lessor may reclaim the asset.

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<sup>1</sup> If enforcement of the lessor's ownership rights against the lessee's creditors is subject to permanent disclosure in order to maintain this protection, e.g. publication in the commercial court registry (for equipment leasing) or publication in the mortgage registry (for lease agreements of over twelve years).

**Pondération des opérations de crédit-bail immobilier  
dans les ratios prudentiels**

Résultats de l'enquête CBI	Pondération à 50%				
	1996	1997	1998	1999	2000
<b>TOTAL</b>					
Nombre d'immeubles recommercialisés	296	332	316	559	498
Valeur résiduelle financière au moment de la vente (millions de francs)	1 066	1 320	1 191	2 153	1 723
Loyers, charges et débours impayés au moment de la vente (millions de francs)	129	93	143	179	185
Prix de vente ou assiette des nouveaux contrats (millions de francs)	777	917	865	1 723	1 515
Perte/gain (millions de francs)	-418	-496	-469	-609	-392
<b>Taux de récupération brut</b> (Prix de vente/valeur résiduelle financière)	<b>73%</b>	<b>70%</b>	<b>73%</b>	<b>80%</b>	<b>88%</b>
<b>Taux de récupération net</b> (Prix de vente/valeur résiduelle financière + charges)	<b>65%</b>	<b>65%</b>	<b>65%</b>	<b>74%</b>	<b>79%</b>
Nombre de sociétés dont n'ayant pas eu d'opération de recommercialisation dans l'année	32 12	34 11	35 10	36 12	36 10
Encours représenté (1999) par rapport à l'encours total	98 065 47%	114 551 55%	114 981 55%	125 783 60%	125 783 60%
Encours représenté (1998) par rapport à l'encours total	99 825 48%	116 750 56%	116 996 56%	125 589 60%	125 589 60%
production 99 par rapport à la production totale	11 711 43%	13 542 50%	13 795 51%	17 892 66%	17 892 66%

## Equipment leasing

### *I – Recovery rates recorded by five credit institutions over the past few years<sup>2</sup>*

#### **Company A:**

<b>Type of equipment</b>	<b>Recovery rate*</b>
Aeronautics	65.24%
Buses and coaches	86.13%
Miscellaneous vehicles	77.27%
Sailing boats and yachts	62.49%
Commerce vehicles	73.60%
Utility vehicles	75.05%
Private vehicles	72.63%
Plant & machinery	55.99%
Construction	91.90%
Lifting	56.22%
Handling	80.09%
Printing	53.49%

\* Recovery rate for sales made over the past three years

#### **Company B:**

<b>Type of equipment</b>	<b>Recovery rate*</b>
Transport	71%
Industrial	50%
Printing	84%
Construction	80%
Handling	58%

\* -Figures based on profit and loss data for 1997, 1998 and 1999

- "Industrial" equipment includes plant and machinery

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<sup>2</sup> Recovery rate = resale price of recovered asset/total amount outstanding from customer (outstanding balance and unpaid lease instalments).

**Company C:**

Type of equipment	Recovery rate*
Transport	76.26%
Printing	56.32%
Plant & machinery	44.75%

\*Average rates since 1991

**Company D:**

Type of equipment	Recovery rate*
Rolling stock	Average: 83%
Civil engineering	
Handling and lifting	
Waste processing and plant/machinery	
Offset rotary and rotogravure printing	

\*Average recovery rate for non-performing contracts terminated in 1997, 1998 and 1999.

*Note:*

This company compared the amount of each outstanding balance with the corresponding used equipment price for: i) certain industrial vehicle models supplied by two manufacturers (road tractors); ii) industrial lift trucks; and iii) civil engineering equipment such as wheeled diggers and tractor shovels supplied by one manufacturer (see used equipment prices below).

The company made two initial observations:

- The purchase price of a given piece of equipment, at any one time, can vary by up to 15% depending on the buyer's bargaining prowess.
- The amount of the outstanding debt depends on the contract's parameters (duration, rate of balance repayments, residual value).

Bearing in mind these factors, the company has observed that, on average, for a standard four-year straight-line lease with a 6% residual value:

- The outstanding balance is 20% higher than the resale price during the first year of the contract. The outstanding balance subsequently becomes equal to the resale price between the 24<sup>th</sup> and 30<sup>th</sup> month, depending on the type of equipment. Beyond this period, the outstanding balance falls below the resale price.



**Company E:**

	Recovery rate*
All equipment excluding light utility vehicles	60% (+ or - 4%)
Light utility vehicles	75% (+ or - 5%)

\*Including equipment that depreciates quickly, such as computer hardware – Five-year figures (1995-99)

**II - Decline in typical resale value for different types of equipment and comparison with outstanding balance**

**(figures calculated by one company based on different used equipment price guides<sup>(\*)</sup> and experience)**

Number of months	Type of equipment	0-12	24	36	48	60	72	84
Typical resale value (1)	Nautical Aeronautical Railway	80%	70%	60%	55%	50%	45%	40%
Outstanding balance (2)	7 years - RV 1%	88%	76%	63%	48%	34%	18%	1%
Typical resale value (1)	Vehicles	70%	60%	50%	32%	25%	20%	14%
Outstanding balance (2)	5 years – RV 1%	83%	64%	44%	23%	1%		
Typical resale value (1)	Civil engineering Handling Lifting Mobile agric. Printing Plant/machinery	65%	55%	50%	40%	35%	30%	25%
Outstanding balance (2)	5 years – RV 1%	83%	64%	44%	23%	1%		

(\*) Source: used equipment price guides – see attached document.

(1) Resale value as a percentage of new price.

(2) Outstanding balance as a percentage of starting balance, which is approximately equal to the initial purchase price (RV of 1%)

The average resale values shown above are based on two assumptions:

- 1) Purchase prices have been negotiated fairly
- 2) Purchase options retain a market value

The first category of items covers nautical, aeronautical and railway equipment.

Items with high unit prices and long useful lives of at least 20 years have generally been underestimated relative to the resale value chart referred to, but their financing can last more than seven years

The second category covers vehicles

The resale value chart for coaches with 50 seats or more is very similar to the chart for the first category

The third category covers civil engineering, handling, lifting and mobile agricultural equipment, together with plant and machinery and printing systems.

The resale value chart for offset rotary printing equipment and large lifting machines is flatter from the fourth year onwards.

## **USED EQUIPMENT PRICE GUIDES**

- L'ARGUS
- CNPA - Conseil National des Professions de l'Automobile (automotive)
- SIMO - Service Interprofessionnel d'Evaluation des Matériels Agricoles d'Occasion (agricultural equipment)
- DLR - Fédération Nationale des Distributeurs Loueurs et Réparateurs de Matériels de BTP et Manutention (construction and handling equipment)
- REVUE BATEAU (sailing/yachting)  
NAUT'ARGUS  
VOILES ET VOILIERS  
NEPTUNE YACHTING
- INTERNATIONAL AIRCRAFT PRICE GUIDE  
AIRCRAFT BLUEBOOK

## **FINANCIAL LEASING DATA FOR FRANCE**

Since 1970, financial leasing transactions in France have **funded FF 1,150 billion in plant and equipment and FF 620 billion<sup>3</sup> in commercial properties**, making a valuable contribution to French companies' investment efforts.

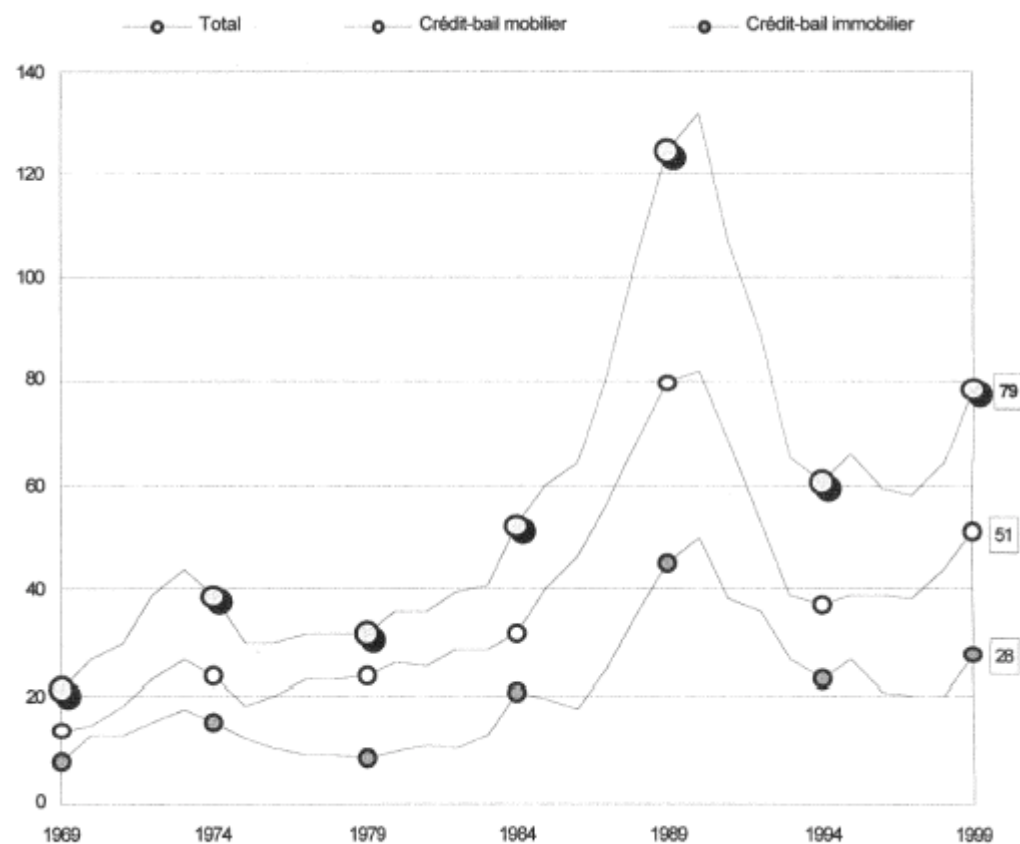
Generally speaking, we can identify five phases in the development of financial leasing activities, and probably the start of a sixth phase, since the introduction of the French Companies Act of 24 July 1966:

- An initial period of **expansion** up to 1973 (average annual volume growth of 21%).
- A **plateau** between 1974 and 1983, corresponding to a consolidation period based on a combination of favourable and less favourable years (impact of successive oil crises). During this period, the overall growth rate was close to zero (-0.3%, breaking down into +1.6% for equipment leasing and -2.8% for property leasing).
- **Very sharp growth** (average of 23% a year) from 1984 to 1990, when new business reached a record peak of FF 113 billion.
- A **steep downturn** between 1991 and 1994 for both equipment leasing and property leasing (average decline of 18% a year). At FF 57 billion, new business in 1994 amounted to half that in 1991.
- A **tentative recovery** from 1995 to 1997, particularly in equipment leasing (average annual rise of 1.1%).
- A **strong rebound** in equipment leasing in 1998 and 1999 (15% average annual growth), followed in 1999 by an upturn in property leasing (+40%). Over the past two years, the overall average growth rate has been 17% a year.

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<sup>3</sup> On a constant French franc basis in 1999.

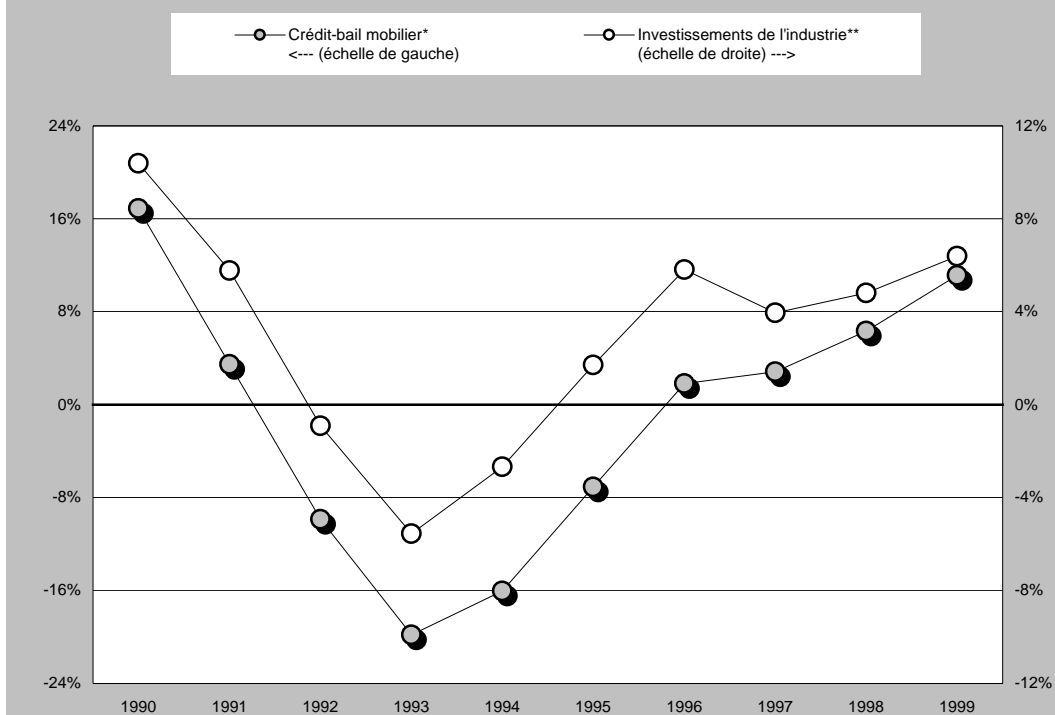
## 30 ans de crédit-bail\*



\* Production annuelle (investissements nouveaux HT). Milliards de francs constants 1999.

**Over the medium-term, we notice that trends in the property leasing sector are almost perfectly in line with those in the equipment leasing sector,** despite the many external factors that influence the very distinct markets targeted by each type of financial leasing activity. Overall, both financing methods are closely correlated with trends in productive investment (see chart on next page).

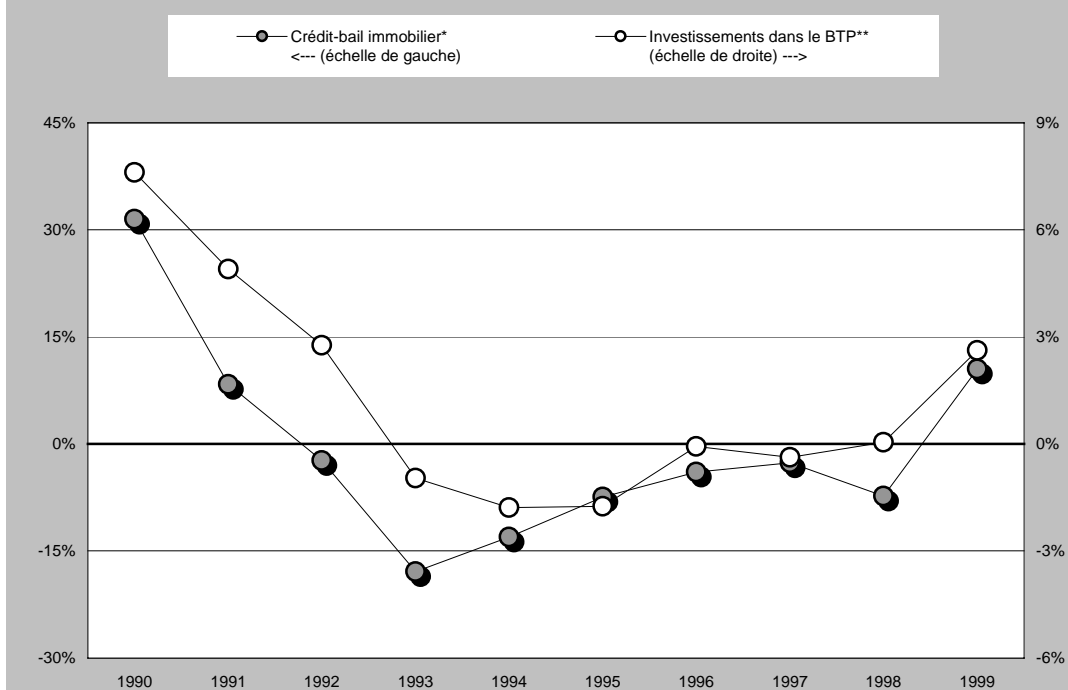
## Crédit-bail mobilier et investissements



\* Evolution annuelle de la production (moyenne mobile sur 3 ans).

\*\* Evolution annuelle des investissements des SNF-EI en véhicules et matériels d'équipement

## Crédit-bail immobilier et investissements



\* Evolution annuelle de la production (moyenne mobile sur 3 ans).

\*\* Evolution annuelle des investissements en bâtiment et travaux publics (moyenne mobile sur 3 ans).

**CREDIT-BAIL****DONNEES CHIFFREES SUR LE PLAN EUROPEEN ET INTERNATIONAL**

Le crédit-bail se pratique dans de très nombreux pays selon un principe de base identique, à savoir la conservation de la propriété par le bailleur. Il peut dans plusieurs Etats être réalisé par des sociétés n'ayant pas le statut d'établissement de crédit, qui peuvent ne pas être soumis au ratio international de solvabilité.

<b>1. LE CREDIT-BAIL EN EUROPE EN 1998</b> <small>Classement des pays 1. selon leur appartenance ou non à l'Union européenne 2. selon le montant décroissant des immobilisations nettes en fin d'année.</small>	<b>Engagements nouveaux de l'année (millions €)</b>			<b>Immobilisations nettes en fin d'année (millions €)</b>		
	<b>TOTAL</b>	<b>Crédit-bail mobilier et opérations assimilées (1)</b>	<b>Crédit-bail immobilier</b>	<b>TOTAL</b>	<b>Crédit-bail mobilier et opérations assimilées (1)</b>	<b>Crédit-bail immobilier</b>
<b>PAYS DE L'UNION EUROPEENNE (2)</b>	<b>127 067</b>	<b>108 670</b>	<b>18 397</b>	<b>312 363</b>	<b>213 918</b>	<b>98 445</b>
ROYAUME-UNI	31 293	31 003	290	89 033	86 140	2 893
ALLEMAGNE	32 653	27 219	5 434	81 251	45 704	35 547
FRANCE	18 525	15 463	3 062	59 965	25 597	34 368
ITALIE	17 163	11 590	5 573	27 269	17 727	9 542
ESPAGNE	6 402	5 552	850	11 955	9 084	2 871
AUTRICHE	3 541	2 500	1 041	11 225	4 717	6 508
SUEDE	4 324	3 757	567	9 014	6 504	2 510
PAYS BAS	3 379	2 959	420	7 622	5 672	1 950
IRLANDE	2 047	2 047	0	5 640	5 640	0
PORTUGAL	2 593	1 995	598	4 173	2 653	1 520
DANEMARK	1 777	1 584	193	3 700	3 255	445
FINLANDE	620	560	60	1 185	894	291
LUXEMBOURG	195	195	0	331	331	0
BELGIQUE (3)	2 555	2 246	309	n. d.	n. d.	n. d.
<b>PAYS HORS UNION EUROPEENNE (4)</b>	<b>10 082</b>	<b>9 489</b>	<b>593</b>	<b>16 429</b>	<b>15 026</b>	<b>1 403</b>
SUISSE	3 050	2 935	115	5 724	4 863	861
REPUBLIQUE TCHEQUE	2 037	1 906	131	3 865	3 684	181
NORVEGE	1 546	1 524	22	2 579	2 495	84
POLOGNE	1 648	1 405	243	2 123	1 895	228
HONGRIE	882	852	30	1 089	1 089	0
SLOVAQUIE	466	466	0	604	603	1
ESTONIE	213	187	26	445	397	48
SLOVENIE (3)	240	214	26	n. d.	n. d.	n. d.
<b>TOTAL</b>	<b>137 149</b>	<b>118 159</b>	<b>18 990</b>	<b>328 792</b>	<b>228 944</b>	<b>99 848</b>

Source : LEASEUROPE.

(1) Y compris opérations de location avec option d'achat réalisées avec des particuliers et opérations de location financière.

(2) GRECE : données non disponibles.

(3) Données non disponibles en termes d'immobilisations nettes.

(4) Pays membres de LEASEUROPE.

<b>2. LE CREDIT-BAIL (1) DANS LE MONDE EN 1997</b>	<b>Engagements nouveaux de l'année (milliards de dollars US)</b>	<b>% du total</b>
<b>AMERIQUE DU NORD</b>	<b>189,2</b>	<b>45,9%</b>
Dont ETATS-UNIS	179,8	43,6%
<b>EUROPE</b>	<b>115,2</b>	<b>27,9%</b>
Dont ALLEMAGNE	31,9	7,7%
Dont ROYAUME-UNI	20,8	5,0%
Dont FRANCE	18,1	4,4%
Dont ITALIE	10,3	2,5%
<b>ASIE</b>	<b>80,2</b>	<b>19,4%</b>
Dont JAPON	60,1	14,6%
<b>AMERIQUE DU SUD</b>	<b>15,9</b>	<b>3,9%</b>
Dont BRESIL	12,2	3,0%
<b>AUTRES ZONES</b>	<b>12,1</b>	<b>2,9%</b>
AUSTRALIE et NOUVELLE-ZELANDE	6,9	1,7%
AFRIQUE	5,2	1,3%
<b>TOTAL</b>	<b>412,6</b>	<b>100,0%</b>

Source : WORLD LEASING YEAR BOOK 1999.

(1) Opérations sur biens mobiliers et immobiliers.

**CREDIT-BAIL****DONNEES CHIFFREES SUR LE PLAN EUROPEEN ET INTERNATIONAL**

Le crédit-bail se pratique dans de très nombreux pays selon un principe de base identique, à savoir la conservation de la propriété par le bailleur. Il peut dans plusieurs Etats être réalisé par des sociétés n'ayant pas le statut d'établissement de crédit, qui peuvent ne pas être soumis au ratio international de solvabilité.

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(1) Opérations sur biens mobiliers et immobiliers.



## Simulations of French Banks – comparison with Basel BRW

### ASSUMPTIONS

table 1:

#### PD assumptions

	1Y	3Y	5Y
AAA	0,01%	0,04%	0,09%
AA	0,03%	0,11%	0,24%
A	0,06%	0,28%	0,68%
BBB	0,17%	0,98%	2,39%
BB	1,44%	5,78%	11,11%
B	6,96%	19,97%	30,81%
CCC	27,69%	56,96%	69,81%

#### other assumptions

LGD = 50%  
asset correlation = 0,20

MTM adjustment

loss coverage target: 99,5%

table 2:

#### Basle capital charges (8%) based on BRW

	1Y	3Y	5Y
AAA	0,16%	0,59%	1,03%
AA	0,44%	1,15%	1,87%
A	0,77%	1,71%	2,65%
BBB	1,82%	3,24%	4,66%
BB	9,68%	12,57%	15,47%
B	27,92%	31,87%	35,81%
CCC	50,00%	50,00%	50,00%

### RESULTS

table 3:

#### French Banks' average EL+UL figures

	1Y	3Y	5Y
AAA	0,15%	0,46%	0,81%
AA	0,27%	0,70%	1,18%
A	0,52%	1,17%	2,18%
BBB	1,14%	2,55%	4,14%
BB	5,37%	9,23%	12,56%
B	16,76%	22,15%	23,59%
CCC	35,55%	39,65%	40,16%

table 4:

#### Comparison BRW capital / FBF (EL+UL)

	1Y	3Y	5Y
AAA	10%	28%	27%
AA	59%	64%	58%
A	47%	47%	22%
BBB	61%	27%	13%
BB	80%	36%	23%
B	67%	44%	52%
CCC	41%	26%	24%

gap BRW/BBF	52%	39%	31%
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table 5:

#### French Banks' average UL figures

	1Y	3Y	5Y
AAA	0,14%	0,46%	0,80%
AA	0,27%	0,69%	1,14%
A	0,48%	1,12%	2,07%
BBB	1,05%	2,38%	3,78%
BB	4,74%	8,04%	10,83%
B	12,81%	17,32%	17,94%
CCC	21,67%	24,01%	23,79%

table 6:

#### Comparison BRW capital / FBF (UL only)

	1Y	3Y	5Y
AAA	12%	30%	28%
AA	64%	67%	63%
A	61%	53%	28%
BBB	73%	37%	23%
BB	104%	56%	43%
B	118%	84%	100%
CCC	131%	108%	110%

gap BRW/BBF	81%	62%	57%
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## **FRENCH BANKS' DATA ON ELIGIBLE COLLATERAL**

### **I/ MINERALS AND METALS : 10-day volatility @99%**

	# of respondents	average haircut	standard deviation
oil	3	15%	4%
aluminium	3	8%	1%
silver	1	13%	NS
copper	3	10%	2%
tin	1	2%	NS
nickel	3	13%	0%
lead	1	8%	NS
zinc	1	9%	NS

### **II/ OTHER COLLATERAL**

	# of respondents	average LGD	standard deviation
real estate	4	33%	5%
account receivables	2	25%	4%
transportation vehicle	4	25%	5%
industrial equipment	4	38%	1%
inventories	1	34%	N/S

**GUARANTEES : joint default probabilities matrix****joint default probabilities (correlation 0,50)**

		PD entity B													
		0.03%	0.05%	0.10%	0.20%	0.40%	0.50%	0.70%	1.00%	2.00%	3.00%	5.00%	10.00%	15.00%	20.00%
P D  E n t i t y  A	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.01%	0.02%	0.02%	0.02%
	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.01%	0.02%	0.02%	0.03%	0.04%	0.04%
	0.10%	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.01%	0.02%	0.03%	0.04%	0.05%	0.06%	0.07%	0.08%
	0.20%	0.00%	0.00%	0.00%	0.01%	0.02%	0.02%	0.03%	0.03%	0.05%	0.07%	0.09%	0.12%	0.14%	0.16%
	0.40%	0.00%	0.00%	0.01%	0.02%	0.03%	0.04%	0.05%	0.06%	0.10%	0.12%	0.17%	0.23%	0.27%	0.30%
	0.50%	0.00%	0.00%	0.01%	0.02%	0.04%	0.04%	0.06%	0.07%	0.12%	0.15%	0.20%	0.28%	0.33%	0.37%
	0.70%	0.00%	0.01%	0.01%	0.03%	0.05%	0.06%	0.07%	0.10%	0.15%	0.20%	0.27%	0.38%	0.45%	0.51%
	1.00%	0.00%	0.01%	0.02%	0.03%	0.06%	0.07%	0.10%	0.12%	0.20%	0.26%	0.36%	0.52%	0.63%	0.71%
	2.00%	0.01%	0.01%	0.03%	0.05%	0.10%	0.12%	0.15%	0.20%	0.33%	0.44%	0.62%	0.93%	1.15%	1.32%
	3.00%	0.01%	0.02%	0.04%	0.07%	0.12%	0.15%	0.20%	0.26%	0.44%	0.59%	0.84%	1.29%	1.62%	1.88%
	5.00%	0.01%	0.02%	0.05%	0.09%	0.17%	0.20%	0.27%	0.36%	0.62%	0.84%	1.21%	1.93%	2.48%	2.92%
	10.00%	0.02%	0.03%	0.06%	0.12%	0.23%	0.28%	0.38%	0.52%	0.93%	1.29%	1.93%	3.24%	4.28%	5.14%
	15.00%	0.02%	0.04%	0.07%	0.14%	0.27%	0.33%	0.45%	0.63%	1.15%	1.62%	2.48%	4.28%	5.76%	7.04%
	20.00%	0.02%	0.04%	0.08%	0.16%	0.30%	0.37%	0.51%	0.71%	1.32%	1.88%	2.92%	5.14%	7.04%	8.71%

## COMMENTS ON MINIMUM REQUIREMENTS

NBCA	IRB	CRITERIA	COMMENTS
<b>238-243</b>	<b>197-200</b>	<b>Overall rating system structure</b>	
238-239	195	Separate assessment of borrower and transaction characteristics	A two dimensional rating system would represent an additional burden whereas a facility rating (or an LGD rating per facility) is not used in the computation of the regulatory capital. The minimum requirements for PD estimation ensure by themselves that borrower ratings are not « tainted » by consideration of facility structure. Therefore, considering that a facility rating is not absolutely necessary, a two-year transition period is requested.
240-241	198	Minimum of 6 to 9 grades for performing loans and 2 grades for non performing loans	The § NBCA 240 refers both to non-performing loans and non-performing grades. A definition of non-performing loans is required, since its meaning and the accounting treatment it triggers may differs from one country to another. Moreover, as each borrower grade is associated to a PD, and not to the performance of loans, definition of grades should not refer to whether the borrower is or is not in a performing situation. A definition of loans that “have been fully charged off” is required.
242	200	No more than 30% of gross exposures in any one borrower grade	As raised by the European Commission, this requirement should force some institutions that focuses on specific products or borrowers segments to a division of grades exceeding the actual accuracy of a usual rating assessment. As said in the NBCA § related to the criteria of the rating system, they should demonstrate an ability to differentiate risk. Such ability should be appreciated considering the business and strategy of the institution and so left to the national supervisor judgement.
<b>244-247</b>	<b>201-204</b>	<b>Completeness and integrity</b>	
244	202	Each separate legal entity should be separately rated	Does it mean that each separate entity must be rated without taking account of its shareholders' potential support?
245-246 255	203	Independent assignment or review	The NBCA § 255 in its present writing might let suppose that ratings should be assessed by a specific control unit acting as an internal rating agency. This is not the actual organisation of most institutions where rating assessment is inherent to the credit analyst function. Splitting the two tasks would not add to the performance of the rating function while being an additional burden. It is thus requested that the text in § 255 « assigning and/or reviewing and monitoring internal ratings » be deleted.
247	204	Procedure to update ratings in a timely fashion, in general within 90 days (30 days if the borrower whose financial condition is weak)	The NBCA § 247 provides for an update of a borrower rating within in general 90 days after reception of an update of its financial condition, this delay being reduced to 30 days for borrowers in weak or deteriorating financial situation. This requirement would impose a large concentration in time of the annual reviews since companies generally issue their annual financial statements in a relatively short period of time, this period depending upon countries. It is thus required that this delay be adapted to the creditworthiness of borrowers, and be significantly extended beyond 90 days for the best borrowers.
<b>248-257</b>	<b>205-209</b>	<b>Oversight</b>	
248	208	Oversight by the board of directors and senior management	The FBF agrees to this objective but considers that some flexibility should be left to senior management on how they want to approve and monitor the rating system
249		Monthly reporting	Considering that the structure of a portfolio does not change substantially in one month, such reporting to the top management as said in NBCA § 249 is not a necessity, except of course for new problem loans for which they generally have a real time information above a given exposure. It is therefore requested to adopt a biannual period for reportings to the top management, together with a more frequent period – typically quarterly- for reportings to the credit control unit
251 266-267 305	42-49 210 219 224	<u>Models :</u> On quantitative models: statistic validation  Quantitative models (continued)	The § IRB-210 provides « to track when an assigned grade deviates from that indicated by the application of the criteria ». Such writing actually implies that the banking institution uses a rating model and that such model is considered robust enough so that any deviations from its output should in fact remain exceptional.  The Accord recognises that banks can have three categories of rating systems, from statistical-based system to constrained or full expert-judgement. In the two latter cases, and particularly in the third one, application of the rating criteria does not automatically lead to a rating,

## ANNEXE VI

NBCA	IRB	CRITERIA	COMMENTS
268-269 303-304	210	Exception tracking	<p>making the monitoring of deviation irrelevant.</p> <p>Where statistical models are used in assessing ratings for large borrowers, they should be considered as an aid tool which provides a « baseline rating » (§ IRB 47) leaving the rater free to assess the final rating, providing his justification in writing.</p> <p>Monitoring overridden ratings should so be limited when statistical models are rather used as scoring models.</p> <p>When qualitative rating systems are concerned, this requirement is not consistent with the importance of human judgement.</p> <p>When quantitative models are concerned, the banks should ensure on an overall basis that exceptions remain at an acceptable level.</p>
254	209	External audit	<p>The cost of such external audit should be supported by the requiring body, not by the banking institution.</p> <p>Following § 18 of the Overview, it is required that the Accord prescribes that the Governments should give the Regulators the resources necessary to support their supervisory duties arising from the Accord.</p>
255-256	209	Credit Review Function	It should made clear that § NBCA 255 and 267 provide the internal control audit to reviewing and monitoring the internal rating process, including audit of the accurateness of assigned ratings based on a sample, this unit not being involved in the daily function of assigning ratings which relies on credit officers.
<b>258</b>		<b>PD estimates</b>	
<b>270-279</b>	<b>216-223</b>	<b>Estimation of PD</b>	
		One year PD.	<p>The French Banks approve the Committee when it states that PD estimates should represent long run averages (NBCA §270). However, they observe that it seems to take a position in contradiction with the above one when it considers that banks must not use such averages if actual default rates are materially higher; but must use them if actual default rates are materially lower (IRBA §217). The French Banks propose that the Committee clarifies this point by reaffirming the use of long run averages, but for material estimation errors. Using short term PDs could result in a significant volatility of capital charges.</p> <p>First event: it should be said that the obligor is highly unlikely to pay its debt obligations rather than likely only.</p> <p>The regulatory bodies must guarantee a level playing field by ensuring that all banks apply consistently the proposed reference definition. In particular, those banks whose internal definition is based on objective events only (events #3 and 4) would have lower internal PDs than those banks using the full spectrum of events.</p>
<b>284-288</b>	<b>226-227</b>	<b>Data collection and IT systems</b>	
		Key borrower characteristics	Compliance with NBCA § 287 could be difficult, if only feasible, particularly for institutions that refer to judgmental ratings. It could be required that in case of material changes in its rating methodology, an institution should demonstrate the consistency of the outputs or be able to reconcile between the previous and the latter outputs, based on a meaningful sample of borrowers.
<b>289-308</b>	<b>228-229</b>	<b>Use of internal ratings</b>	
		Credit risk measurement & management; Analysis of capital adequacy, reserving... Stress tests ; Length of time the system has been in place	The FBF broadly agrees but considers that some flexibility should be left to banks. For instance, it does not seem appropriate to ask for bi-annual stress tests according to the three scenarios across all credit portfolios.
<b>310-323</b>		<b>Minimum requirements for LGD and EAD under the foundation approach, other than for standardised approach</b>	
312-321		CRE ( Commercial Real Estate) and RRE(Residential Real Estate)	The revaluation process required in NBCA § 319 is a heavy and costly burden, and is furthermore not required in the standardised approach. It is requested that such requirement be deleted for RRE and applicable for CRE only to large exposures.
<b>324-365</b>		<b>Minimum requirements for the Advanced IRB Approach</b>	
342		Minimum data observation period no shorter than 7 years	Contradictory to PD requirements (5 years with a 3 year transition period), without any robust rationale. This requirement should therefore be aligned on PD's one.

## **Proposed definitions for structured financing**

### **Cash-flow finance**

- ✓ Project finance stricto sensu, whereby the financing is extended for the construction and/or operation of one or more tangible long term producing asset(s), via a special purpose vehicle (SPV) and with no or limited direct financial recourse to well-established corporate entities. Repayment of the debt obligations depends primarily on the project's cash-flow. All or most of the assets and contracts of the SPV are pledged in favour of / assigned to lenders, who may benefit from sponsors' guarantees during the construction period. Projects are generally operating in one of the following sectors: natural resources, power generation, metallurgy, transportation infrastructure, environmental services, media, telecom.
- ✓ Real estate non recourse project financing, whereby the underlying asset is a property and the financing technique complies with the above definition.
- ✓ Leveraged acquisition financing, whereby the purpose of the transaction is to finance an acquisition. Repayment of the debt is based on the acquired company's cash flows and is usually secured by a pledge on all its tangible and intangible assets.

### **Non-recourse asset-based finance**

- ✓ Shipping, whereby the financing is extended to an SPV which operates a single asset the cash-flows of which are used to repay the debt. The debt is usually non-recourse to the operating shipping company and is secured by a first lien on the asset and assignment of contracts.

### **Asset-based finance with recourse**

- ✓ Aircraft financing, whereby the financing is extended to the airline company or an SPV with recourse to the airline company. Repayment of the debt is based on the airline company's cash-flows and is secured by a first lien on the aircraft.
- ✓ Commodities Trade Financing, which includes
  - self-liquidating transactions whereby proceeds from sale of goods are used to repay the financing (transactional financing); ); the financing is usually secured by the collateralised goods, assignments of contracts and pledge on accounts.
  - pre-export financing set up with major commodity producers in emerging countries, whereby proceeds from export sales are assigned to lenders, exposing them only to performance risk of the producer.

Financed commodities are usually traded on a liquid market: energy (oil, refined and petrochemical products, natural gas, electricity); metals (ferrous and non-ferrous); "soft" commodities (foodstuffs); pulp and paper pulp.

*The French banks believe that the particular features of the above categories do not come only from collateralization but from the overall structure of transactions. Such structure allows for anticipating financial or operating problems and provides effective techniques to re-organising the transaction in a way that minimises the risk of loss for lenders. Beyond the control of assets and critical contracts, the transaction structure usually includes structural and financial covenants such as:*

- *Limitation of drawing rights under the loan agreement to the compliance of some precedent conditions, either technical or commercial*
- *Tight financial ratios on financial structure, repayment capacity, limitation of Capex...*
- *Cross-default, material adverse change, ownership clauses...*
- *In some situations, step-in clauses may allow for the replacement of the project operator if its performances are poor.*

### **PRELIMINARY $\beta$ s TO BE REVIEWED**

A case in point : the  $\beta$  factor proposed for the ‘asset management’ business line

The  $\beta$  factor proposed (0.2 to 0.4) for the ‘asset management’ business line in relation to the total of funds under management appears to be 10 times greater than what it should be (around 0.02) as it has been determined in a study commissioned by EAMA (European Asset Managers Association).

Entitled “Risks and Regulation in European Asset Management : is there a role for capital requirements ?”, this study has been realised by the Oxford Economic Research Associates Ltd and published in January 2001.

Moreover, the European Community states in a project of an amended directive (85 111 EEC) that a “ ... management company should be required to provide an additional amount of own funds ... (that) ... shall be equal to 0.02% of the amount by which the value of the portfolios of the management company exceeds ... ” a given threshold.

### SOME REMARKS ON BUSINESS LINES RISK PROFILE

The Basel Committee has proposed<sup>4</sup> ranges of relative weightings which represent by and large how much operational risk is in each business line. De facto, this allows for the set up of a table with an industry (US risk profile) analysis and a comparable ranking of business lines - in a decreasing order- with regard to operational risk :

<i><b>Risk profile according to Basel</b></i>	<b>Risk profile according to industry (US)</b>
Retail banking	Trading & Sales
Trading & Sales	Brokerage
Commercial Banking	<b>Commercial Banking</b>
Payments & Settlements	Retail banking
Corporate Finance	Corporate Finance
Asset Management	Asset Management
Brokerage	Payments & Settlements

Should an 'Agency Services' business line be introduced as indicated<sup>5</sup> by Basel and as wished by FBF, the amount of its related capital charge for operational risk is very much dependent upon the place given to 'Agency Services' within the above-reported risk profile.

For instance and based upon Basel's initial localisation<sup>6</sup> of 'Agency Services' within 'Banking', a very large french international institution with a considerable 'Agency Services' business volume within its 'Securities' activity has computed the related capital charge and found it to be more than 100 times larger in the Standardised Approach than in the Basic Indicator Approach. As a matter of fact, this charge made up more than 99% of the charge for the whole 'Securities' activity while it made up only 35% of the charge calculated with the Basic Indicator Approach. On the other hand, it is obvious that, based upon the industry's general assessment that 'Agency Services' and 'Payments & Settlements' business operational risk profiles are close to each other, the same institution would find a much lower capital charge.

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<sup>4</sup> See page 21 (Annex 3) of the document "Operational Risk" from the Basel Committee (January 2001).

<sup>5</sup> See footnote 6 on page 7 of the document "Operational Risk" from the Basel Committee (January 2001).

<sup>6</sup> See Annex 2 of the document "Operational Risk" from the Basel Committee (January 2001).



## SOME REMARKS ON SIZE OR VOLUME INDICATORS

In the following, taking a fixed income activity as an example, FBF comments on the proposed risk indicators and highlight any adverse incentives that they might generate.

### 1.1 Standardised approach

#### Indicator

By and large, any fixed income activity falls under two business lines within the proposed Basel structure :

Basel Business Line	Proposed Indicator
Corporate Finance	Gross Income
Trading and sales	Gross Income or possibly VaR

#### Adverse incentive

With a gross income indicator, there is an adverse incentive to maintain a well organised business flow for vanilla transactions.

Consider the operational risk capital for the following two books :

**Book 1:** A book of 100 vanilla interest rate swaps, each on a notional of 100 MEUR. Each deal is booked in the standard systems and each is covered by standard ISDA documentation. The bank makes a 2bp margin on each deal. Assuming a value of 42% for its  $\beta$ , the operational risk capital charge on this book would be:

$$42\% \times 100 \times 100 \text{ M} \times 2\text{bp} = 840,000 \text{ EUR}$$

**Book 2:** A single exotic deal, including a complex option structure, on a notional of 250 MEUR. The deal is initially priced in a spreadsheet, while the systems are updated to accommodate it. The documentation is all non-standard. The bank makes a 15bp margin on this deal. Assuming the 42% weighting, the operational risk capital charge on this deal would be:

$$42\% \times 1 \times 250 \text{ M} \times 15\text{bp} = 157,500 \text{ EUR}$$

Book 2 in itself has significantly greater scope to generate a significant loss due to operational issues than the first book of vanilla deals, yet under the Basle proposals it only attracts 19% of the operational risk capital.

*There is therefore an incentive for banks to favour small numbers of highly structured, high margin deals over a book of vanilla deals.*

This would tend to reduce the price of the former and increase the price of the latter due to supply and demand, which would in fact aggravate the problem because the operational risk capital is calculated on gross revenue. The discrepancy is even worse if the vanilla deals make 3bp and the exotic makes 12bp.

## 1.2 Internal Measurement approach

### Indicator

For Fixed Income, moving to the Internal Measurement Approach would effectively change the Risk Indicator from Gross Income to Volume of Transactions :

Basle Business Line	Basle Risk Type					
	Write-downs	Loss of recourse	Restitution	Legal liability	Regulatory and compliance	Loss or damage of physical assets
Corporate finance	Volume of new deals	Volume of new deals	Volume of new deals	Volume of new deals	Volume of new deals	Value of fixed assets
Trading and sales	Volume of trades	Volume of trades	Volume of trades	Volume of trades	Volume of trades	Value of fixed assets

### Adverse incentives

A volume of transactions based risk indicator would suffer from exactly the same adverse incentive that was identified above for the gross income based approach of the Standardised measure. In fact the adverse incentive is likely to be worse, because based on the number of transactions the exotic deal is 1% of the book, rather than the 19% based on the Gross Income.

The Risk Indicator for loss and damage of physical assets must allow for insurance cover. The largest loss in the event of a fire or other damage to physical assets would be the ensuing loss of revenue while the damage was repaired. Such a risk is covered by an insurance policy. The value of the fixed assets is not a good indicator of this risk and any measure that does not allow for insurance will be a disincentive for banks to off-load a major operational risk.

*An operational risk capital based on the number of transactions would create an incentive to undertake the same business in fewer transactions. This could be accomplished by delaying the booking of transactions with regular counterparties and then rolling a group of transactions into a single, more complex, transaction. Under the New Basle Accord proposals this would reduce the operational risk capital charge, but in practice it would increase the operational risk.*

**Volumetric indicators have a strong tendency to create adverse incentives, therefore promoting dangerous regulatory arbitrages in the booking of fixed income transactions.**