

Sagora...

Lease & Risk Management

Risk Management in Leasing

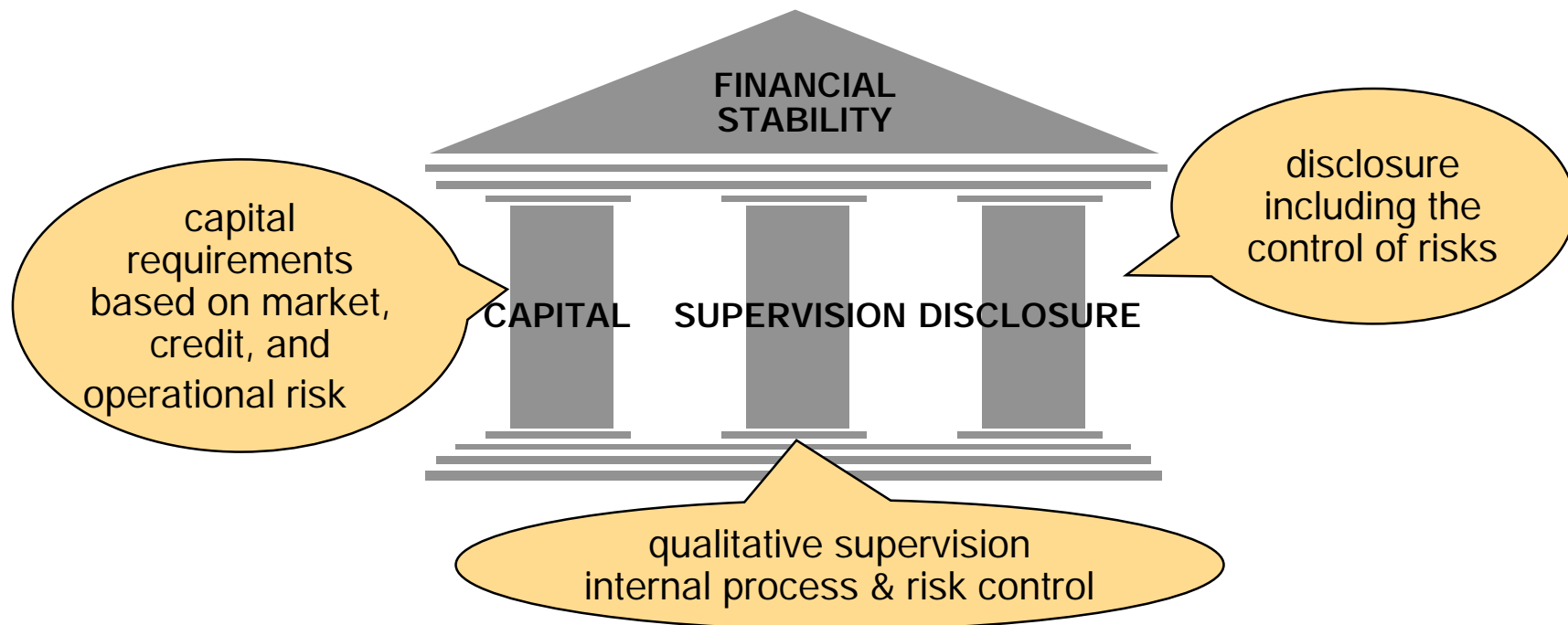
From regulatory compliance to value creation

Dr. Mathias Schmit

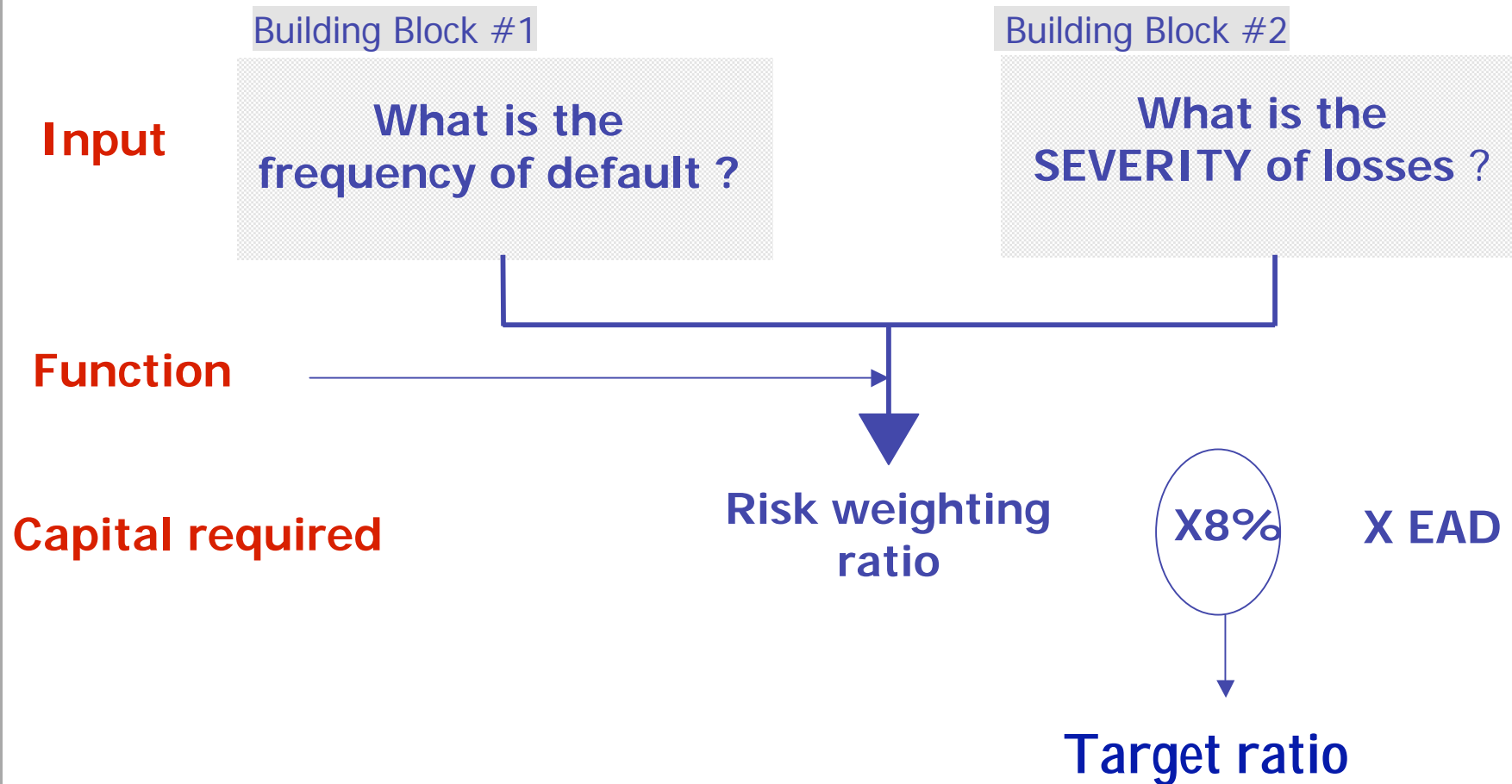
Agenda

- **Basel II: A New Framework**
- Leasing specificities in the CRD
- Impact of Basel II on Leasing Companies' Performance
- Implementation of an Adequate Risk Management Framework
- Some Experience From the Market

Basel II: A new framework



Basel II: A Risk sensitive approach (I)



Basel II: A Risk sensitive approach (II)

	Standardized	IRB « Foundation »	IRB « Advanced »
Pillar I	<ul style="list-style-type: none"> • External ratings • Collateral management system • RW defined by type of counterpart, product and rating 	<ul style="list-style-type: none"> • Define Internal ratings • Define PD (including historic data) • Split portfolio by exposure category 	<ul style="list-style-type: none"> • Build extended loss/exposure database (PD, LGD, EAD), including historic data
Adapt exposure/capital calculator			
Pillar II	Robustness of systems and controls, audit trails, new reporting system		
Pillar III	Ensure that credit data is captured, analyzed, aggregated, and reported correctly Ensure systems and processes can pull-together the data needed to satisfy disclosure requirements		
	<ul style="list-style-type: none"> • Disclose use of approach 	<ul style="list-style-type: none"> • Disclose PD/portfolio estimates • Disclose models/methodologies 	<ul style="list-style-type: none"> • Disclose LGD, EAD assumptions & statistics

Timetable

- A two-stage implementation in the EU:
 - 2007: Option to use simple and intermediate approaches or wait 2008
 - 2008: Banks planning to use the most advanced would apply the new rules
- US implementation postponed

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 - Pillar I
 - Pillar II
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Recognition of other physical collateral

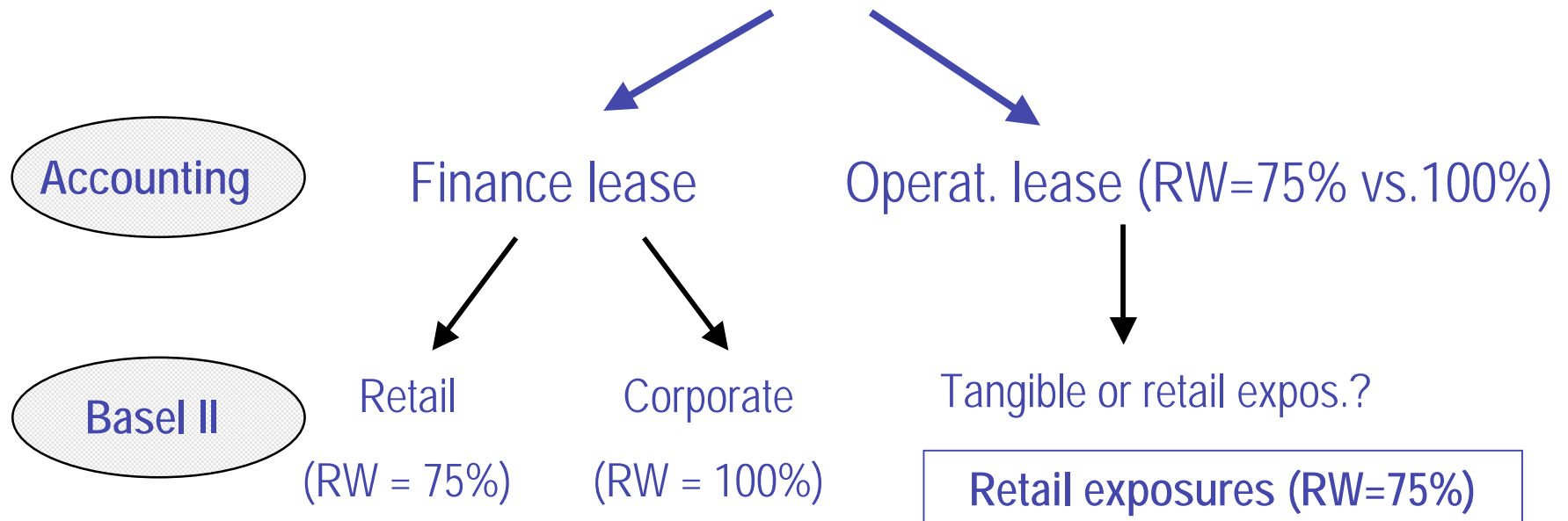
- Legally enforceable and only first liens and ability to
 - liquidate the collateral readily
 - establish objectively a price or market value, its volatility and frequency in which it can be obtained.
- Value of property shall be monitored on a frequent basis
 - Loan agreement shall include detailed descriptions of the collateral and specifications of the manner and frequency of reevaluation
- Credit institution must have the right to physically inspect the property
 - Policies and procedures
- Procedures to monitor that property is adequately insured against damage

Recognition of Leasing

- “The minimum requirements for the collateral type must be met. In addition, the bank must also meet the following standards:
 - . Robust risk management
 - . Robust legal framework
 - . The difference between the rate of depreciation of the physical asset and the rate of amortisation of the lease payments must not be so large as to overstate the credit risk mitigation.”

Standardized Approach

- Initially, no definition of lease exposures
 - How should retail leases be risk weighted?
 - How should retail leases EAD be calculated?



IRB: Guaranteed residual value

EU translation : Guaranteed Residual Values

lease exposures as the minimum lease payments under IAS 17

Guaranteed residual value	Basel II	EU Directive	Assumptions: PD=1% LGD=30%
0%	2,6%	2,6%	
20%	3,7%	2,6%	
40%	4,8%	2,6%	



Better consideration of leasing practice

Minimum requirements for guarantee

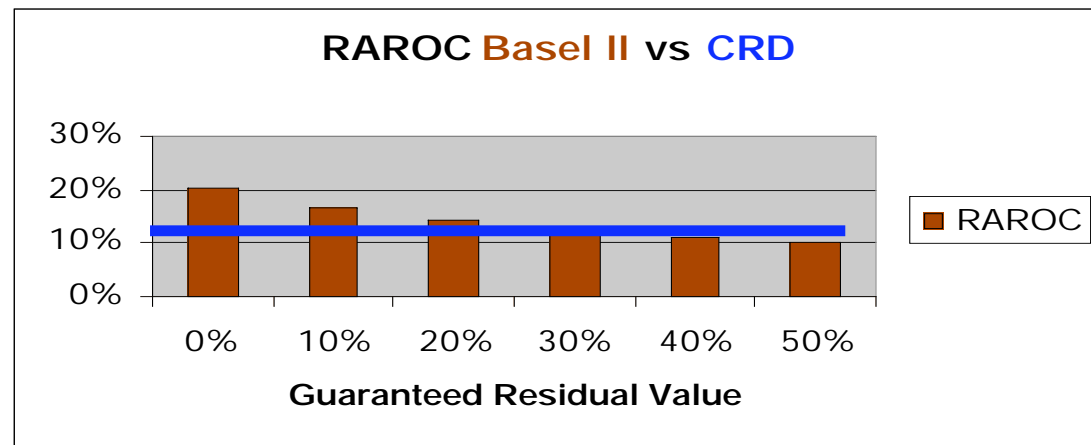
Min requirements set out in Annex VIII:

- **Credit** protection → direct
- The contract → not contain any clause outside the direct control of lender
- Protection → legally enforceable in all jurisdictions
- Payment by guarantor → not be subject to the lending institution having to pursue the defaulting obligor first
- Guarantee
 - documented (assumed by the guarantor)
 - cover all payment types; if certain types are excluded → value of the guarantee must be adjusted to reflect this

And my RAROC?

Assumptions

3-Month Libor	3,5%
Loan Spread	1,40%
Debt Funding Cost (Libor)	3,5%
Admin. /Operat. Exp.	0,40%
PD	1,0%
LGD	30%
Credit risk capital required	2,6%
RV risk weight if non credit	
obl.	100,0%
Target ROE (pre-tax)	12%
Basel II target ratio	8%



Gain for the industry: indicative

- New assets in car leasing: € 56 billion
- Average RV: 20%
- Rough estimation:

Capital savings in the order of magnitude of
€ 450 to 570 million

IRB : (Un)guaranteed residual value

EU translation : Unguaranteed Residual Values

Re-marketing risk : only at the end of the contract

Basel II : 100% risk weighted each year

EU Directive : 100% / **N** risk weighted each year

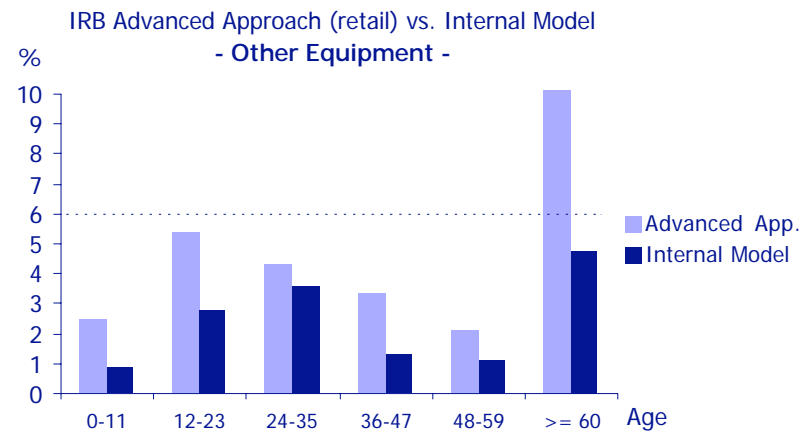
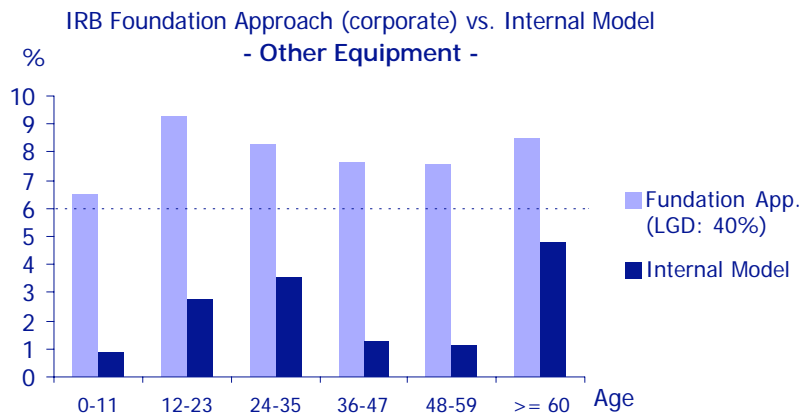
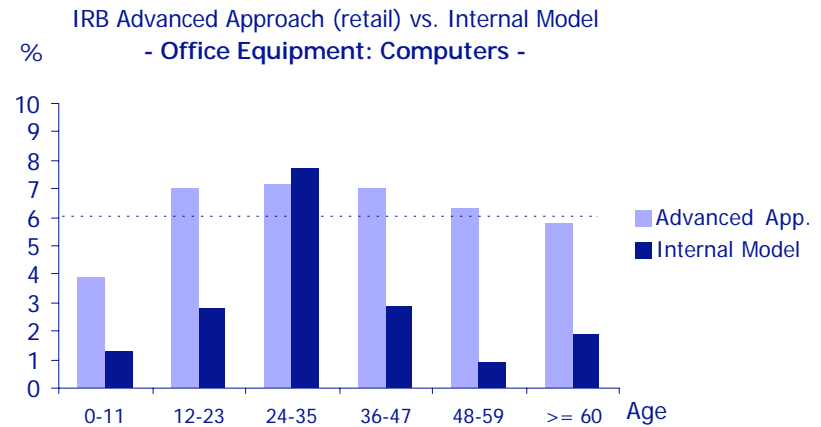
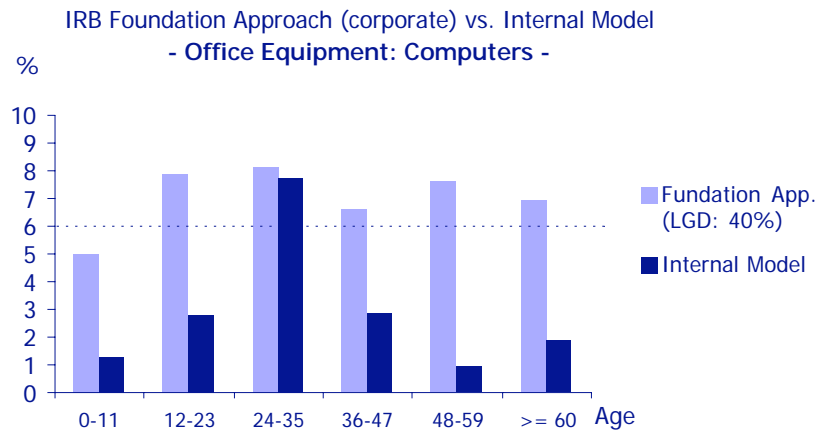


Better consideration of leasing practice

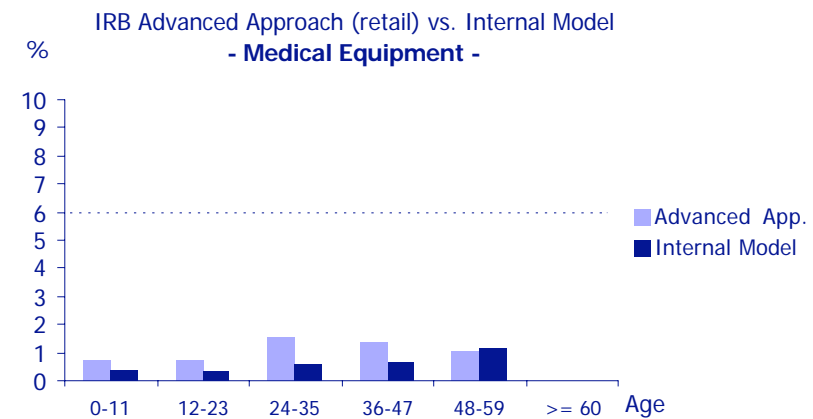
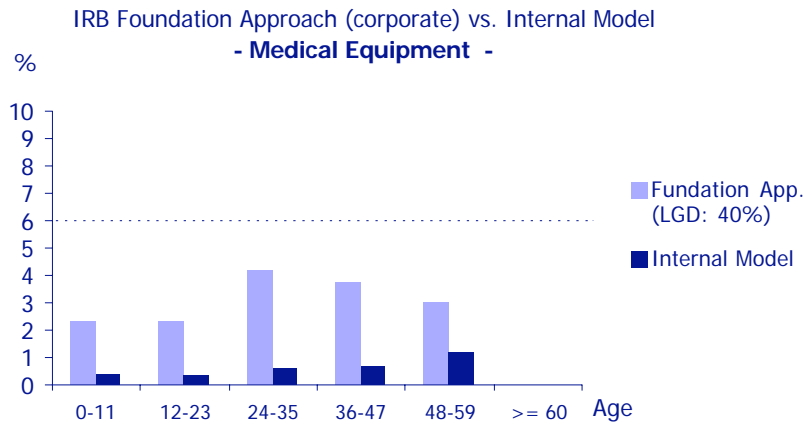
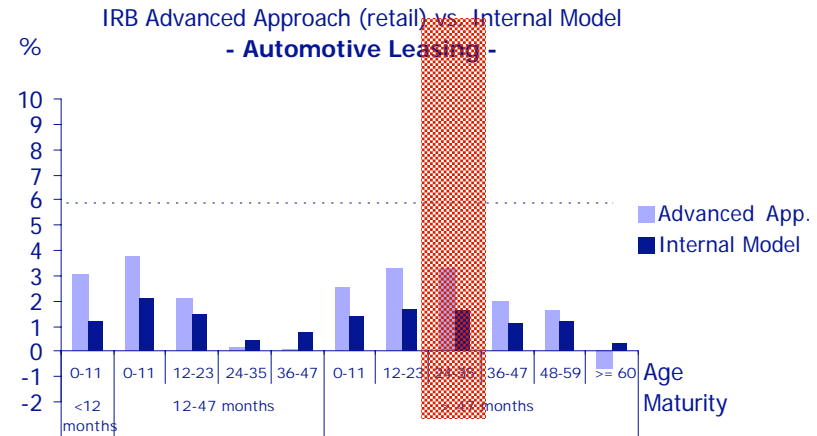
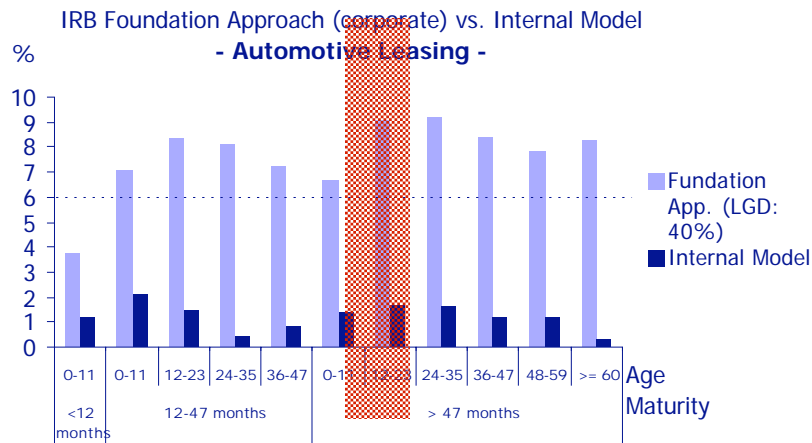
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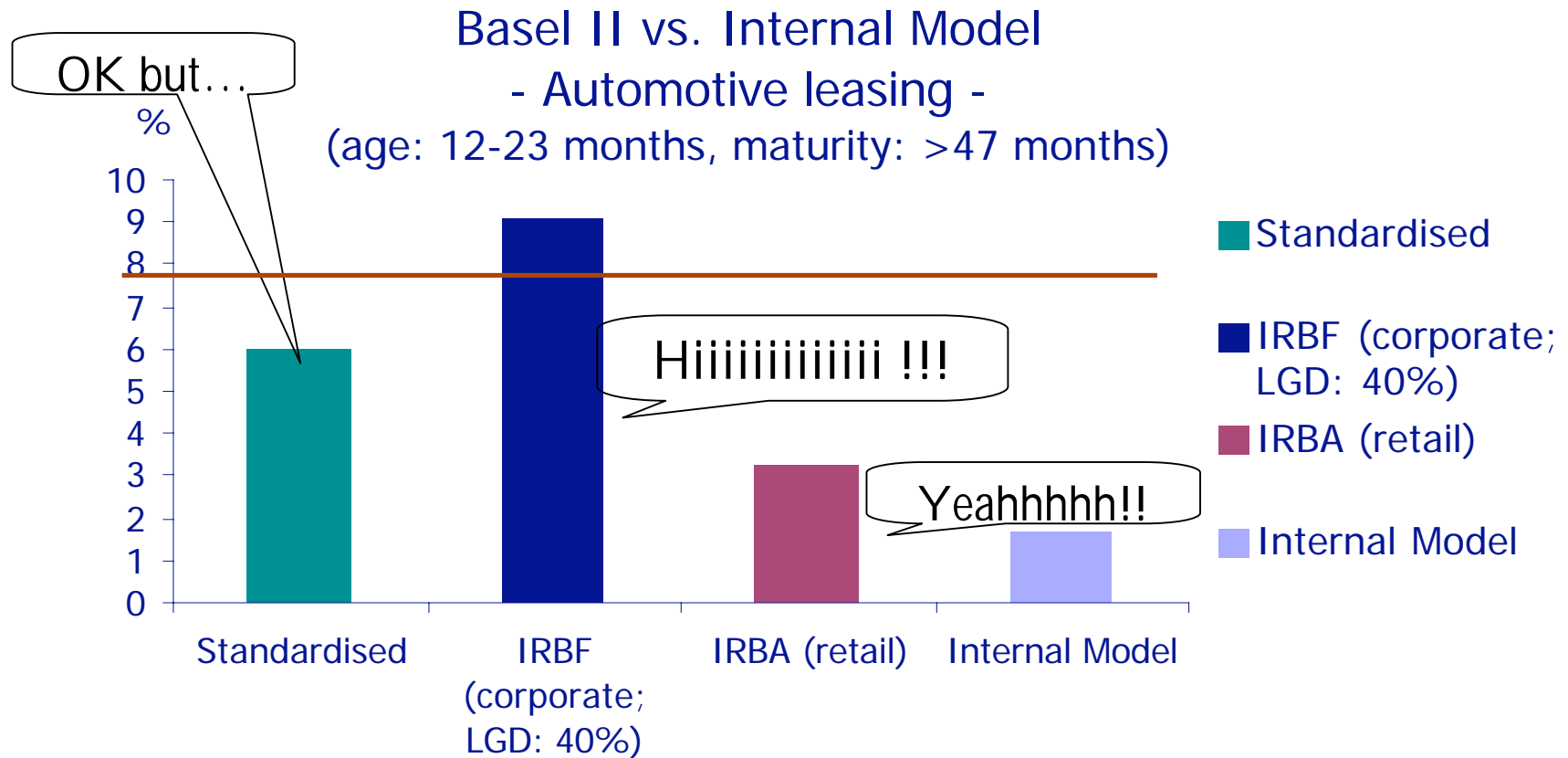
Basel II: Impact on Leasing (I)



Basel II: Impact on Leasing (II)



Basel II: Impact on Leasing (III)

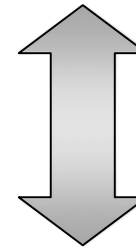


Source: Schmit M., Journal of Banking and Finance, April 2004.

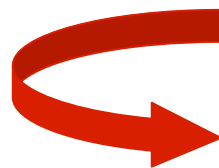
Impact on Performance

Risk Addjusted Return On Capital

$$\text{RAROC} = \frac{\text{Net Revenues} - \text{Expected Loss}}{\text{Economic capital}}$$



Regulatory capital

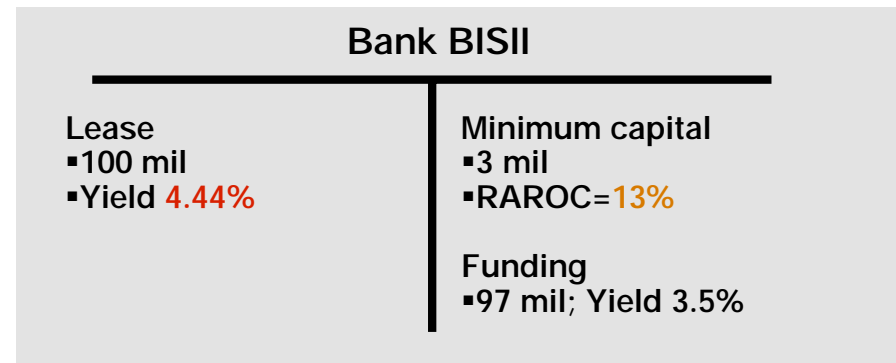
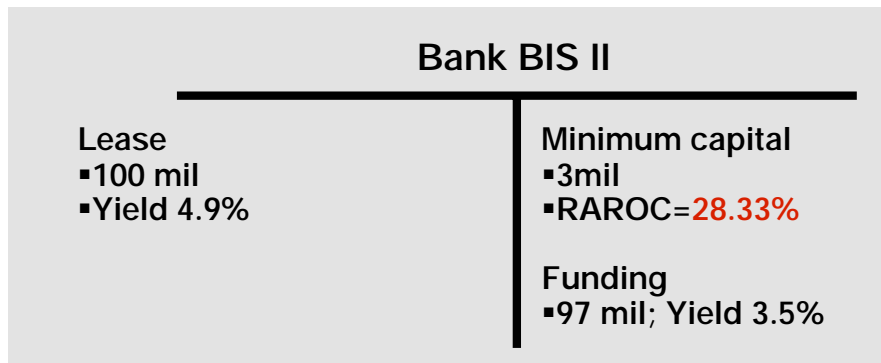
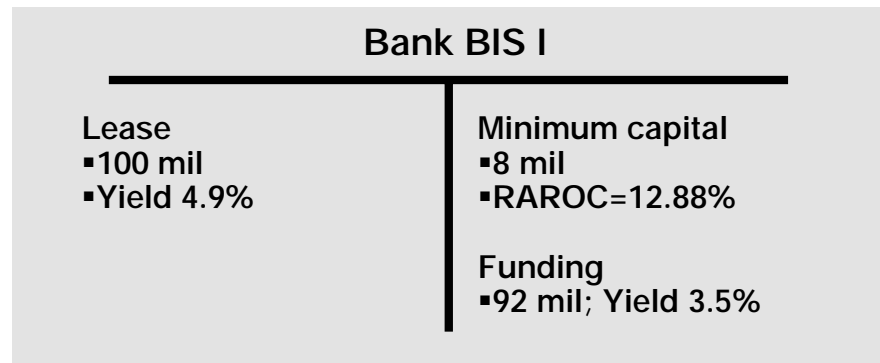


Performance - Shareholders

The change in capital requirements

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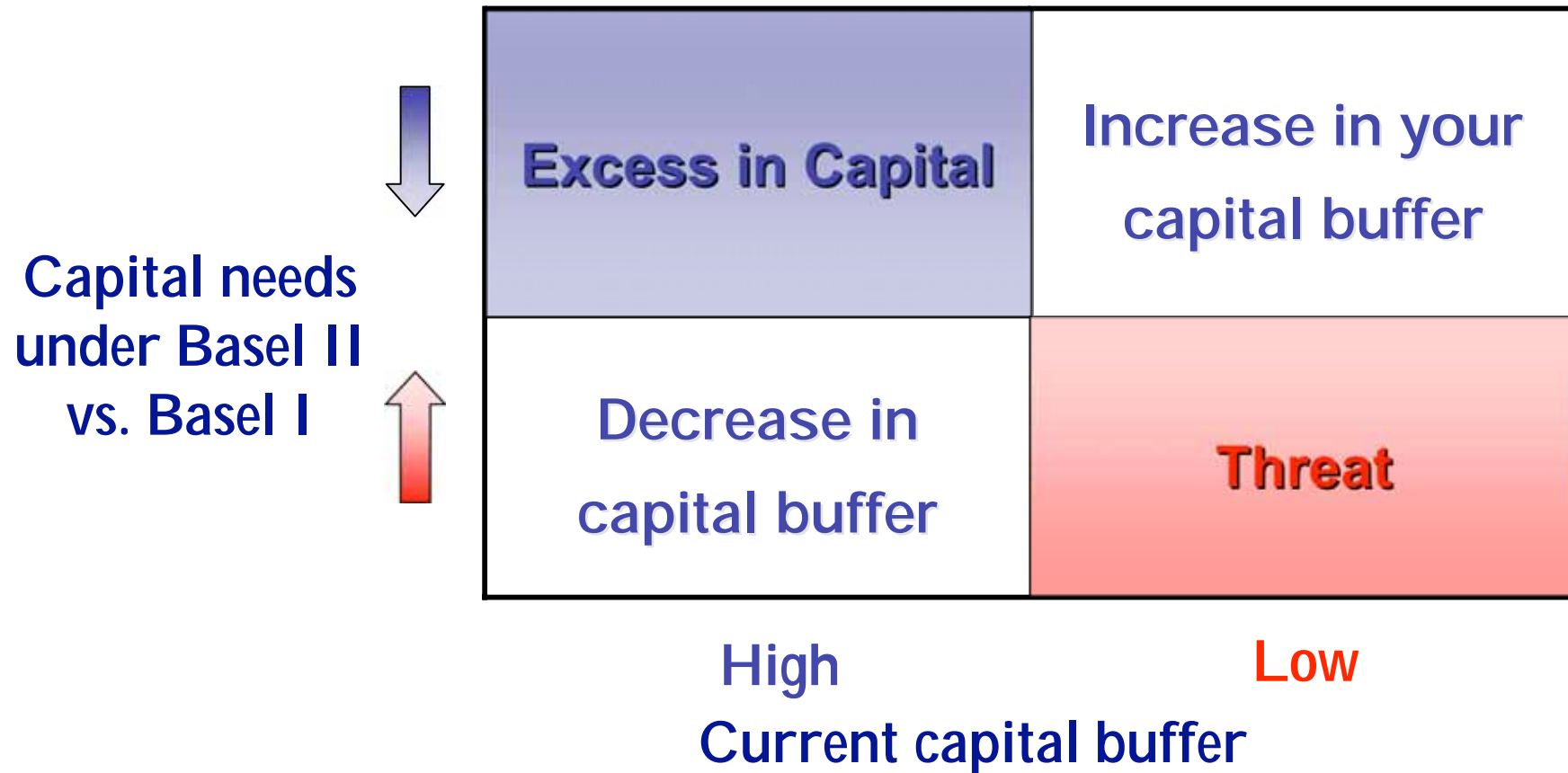
The change in capital requirements



Impact on Pricing

Capital Requirement	RAROC / ROE	Pricing
↓	↗	= (margin constant)
↓	=	↘ (decrease margin)

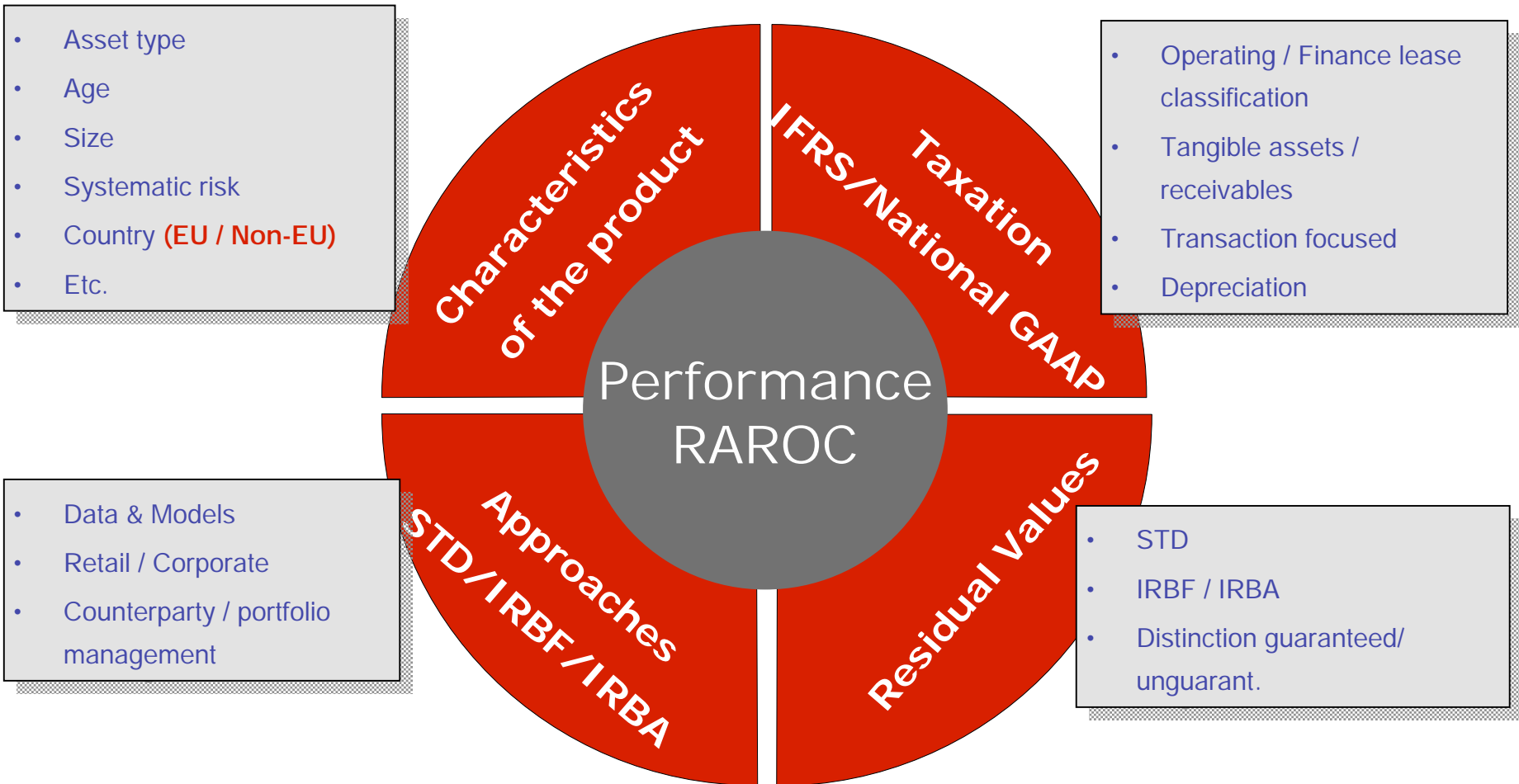
Basel II: Threats and Opportunities



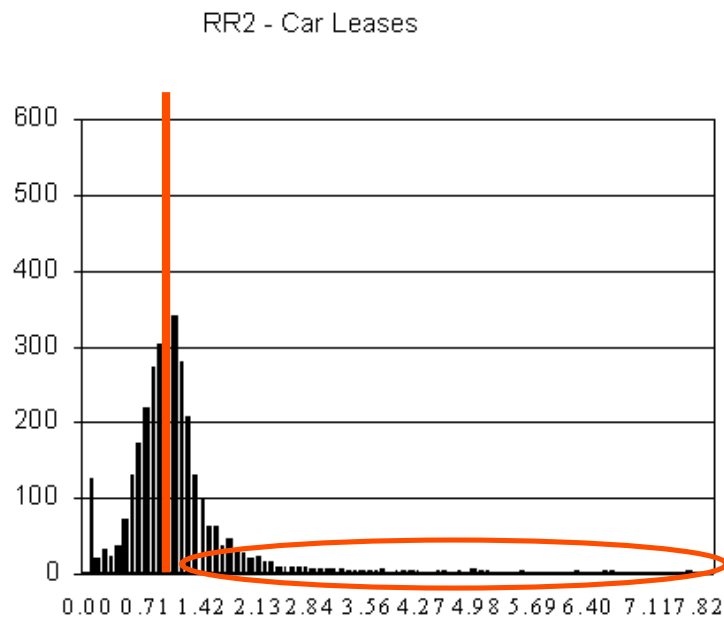
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Performance Drivers



Volatility



Lack of data, RR can be $> 100\%$
If constraint on $RR \leq 100\%$
↓
Decrease in volatility of 30% to 50%

The credit institution shall address the volatility or a **proxy of the volatility** of the value of the collateral.

Downturn LGDs (I)

Guidance provided by the
Basel II Committee (& CEBS).



-LGDs parameters must reflect economic downturn conditions where necessary to capture the relevant risks.

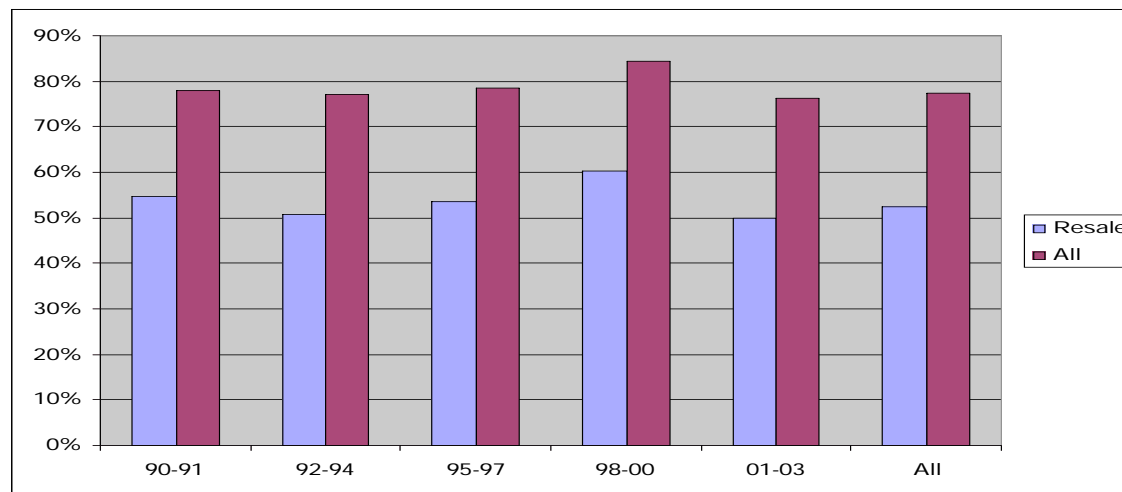
-Supervisors will continue to monitor and encourage appropriate approach to this issue.



Downturn LGDs (II)

- Study is published in a book (RiskBooks). Results are available:
 - Over the period 1990-2003 for Car / other automotive / medical equipment / IT / other equipment and for a given age of the portfolio

e.g. Recovery Rates in respect to business cycles Car leases



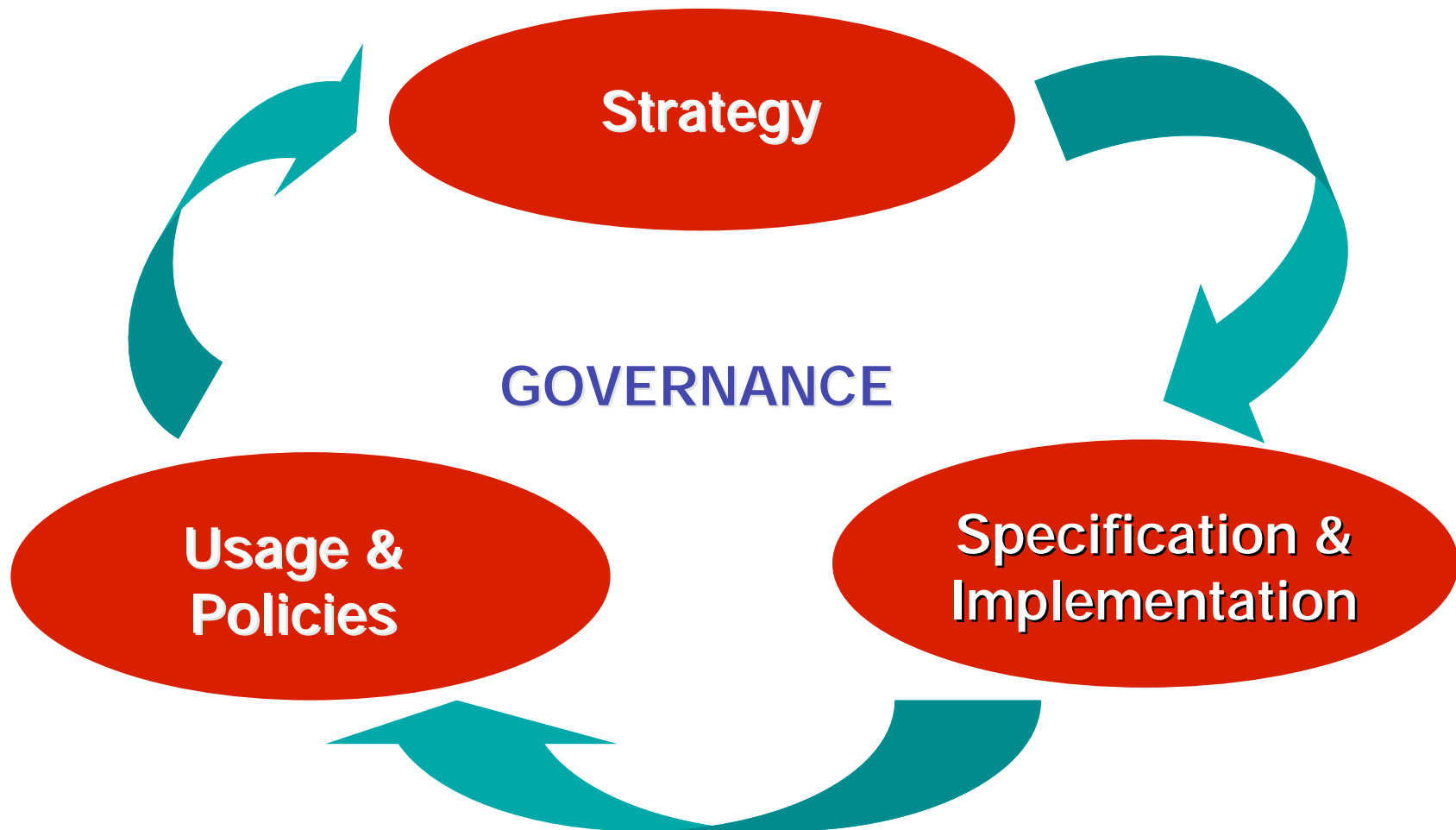
Don't forget the Use Test

- High level **business case must be fulfilled** in order to ensure that the model purpose and expected benefits are clearly understood
- **Information used or produced by the rating systems** to determine regulatory capital is **also used** in the course of conducting **regular business**
 - particularly in risk management
 - decision-making process, and in its credit approval,
 - internal capital allocation, and
 - corporate governance functions.

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An Integrated RMF



Some Experience from the Market

- Better **knowledge** of risk will allow **better allocation of capital** and thus a better performance at the group level but also at the **entity level**
- The **European leasing industry** has many strengths to exploit
 - Ownership
 - Good recovery rates (low LGD) for many assets even in downturns
 - Specific rules thanks to Leaseurope
- RMF is about delivering **quality** throughout the organization
 - This leads to **value creation** that comes on top of a pure regulatory compliance
 - The leaders will attract most of the **competitive advantages**

Some references

- Schmit M., "Credit risk in the leasing industry", *Journal of Banking and Finance*, 2004, 28, pp. 811-833.
- Schmit M., "Is automotive leasing a risky business?", *Finance*, forthcoming.
- Schmit M., "The new Basel capital accord and the future of the European financial system", Report of a CEPS (Centre for European Policy Studies) Task Force, pp. 47-50, 2004.
- Laurent M- P and M. Schmit, "Estimating "distressed" LGD on defaulted exposures: A portfolio model applied to leasing contracts", in *Recovery risk: the next challenge in credit risk management*, a RiskBooks publication edited by Altman E., A. Resti and A. Sironi, pp. 307-322, 2005.
- Laurent M-P, "Asset return correlation in Basel II: Implications for credit risk management", under review in *Risk*.

For More Information

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Thank you for your attention !

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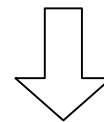
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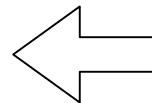
Wrap-Up

- Regulatory excess capital above economic capital produces no additional income
- Excess capital carries cost of capital
- that destroys shareholder value

- Management is willing to reduce this excess capital
- Better understanding of risk drivers is necessary



Model Lifecycle
Validation



Potential business
development