BaFin

Solvency II:

Principles - International Cooperation -

Current Issues

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Quantitative Risk Models at BaFin

BaFin is an integrated financial services supervisor

Line Supervision (BA/VA/WA)	**Cross-Sectoral Risk Modelling (Q RM)**
Detailed knowledge of the sector and individual firms	**Model experience across all risk classes and sectors**
Responsible for	**Responsible for**
▶ Coordination	▶ Quantitative risk models
▶ Qualitative requirements	▶ On-site inspections
▶ "One face to the client"	▶ Regulation
	▶ Research

Rules have gaps.

Example for rules-based regulation:

Market risk standard formula (Basle 1996)

▶ only a finite and small number of scenarios measure the market risk of any given portfolio

▶ these scenarios are the same for all banks

Rules encourage "tick-the-box" mentality for supervisors and firms.

Rules can be arbitraged.

Rules are inflexible

▶ over time

▶ across firms

Real world is too complex for rules.

The challenge of complexity

Ashby's Law of Requisite Variety (1956):

> **"Only variety can destroy variety."**

Example: Increasing complexity in products and markets

▶ Rules cannot keep up with the fast innovation of the financial industry

Example: Graduated deterrence

▶ Regulatory agencies have maximum capacity to lever cooperation when they can escalate deterrence in a way that is responsive to the degree of uncooperativeness of the firm, and to the moral and political acceptability of the response (Ayres/Braithwaite 1992)

Internal models as control for risks

The growing complexity of financial markets requires internal models for risk control.

Internal models

- ▶ typically use a large number of scenarios to determine risk
- ▶ are customized to fit the firm's risk profile (proportionality)
- ▶ require a highly developed infrastructure to aggregate the risk information, which improves risk awareness
- ▶ are flexible to adapt to the evolving environment

Firms may write their own rules within boundaries (self-regulation).

In turn, they have to provide transparency.

# Principles as control for internal models.

The complexity of internal models require principles-based regulation and supervision

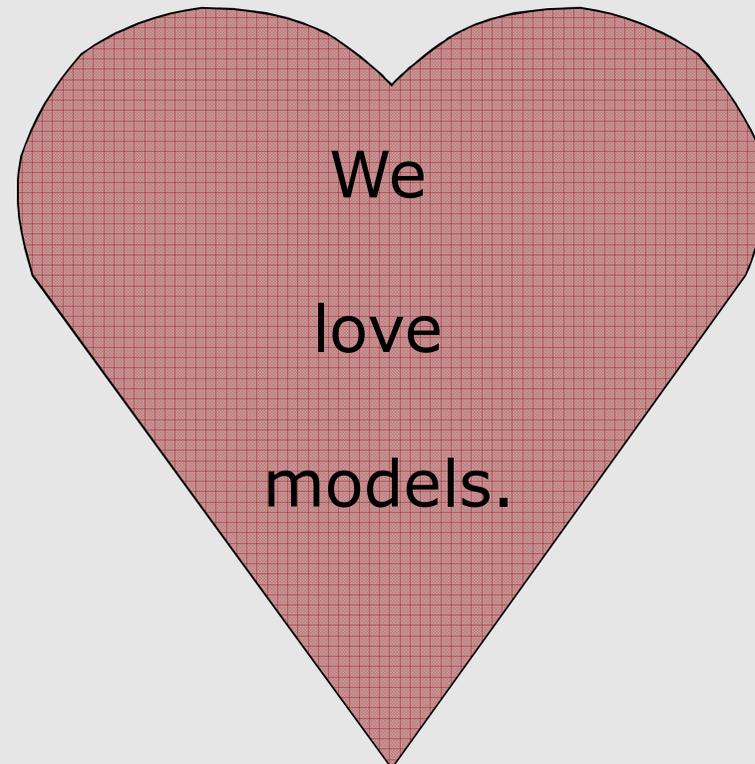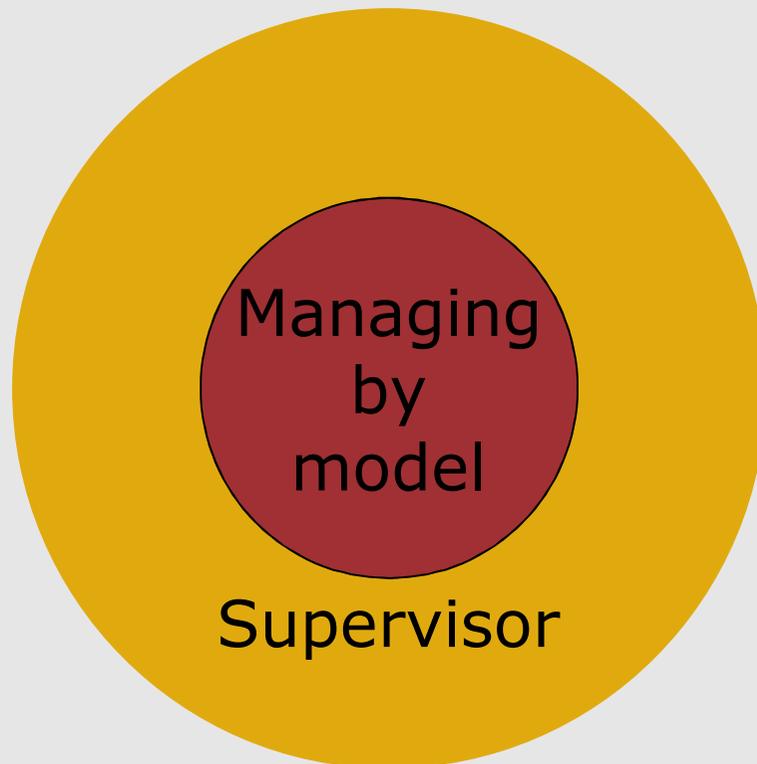**Principles enable a flexible regulatory environment.**

Black 2008: Principles improve

▶ communication

▶ effectiveness

▶ durability

▶ substantive compliance

▶ integration and embedding.

Realistic situation

Q RM Vision: No Gaps!

Managing by model
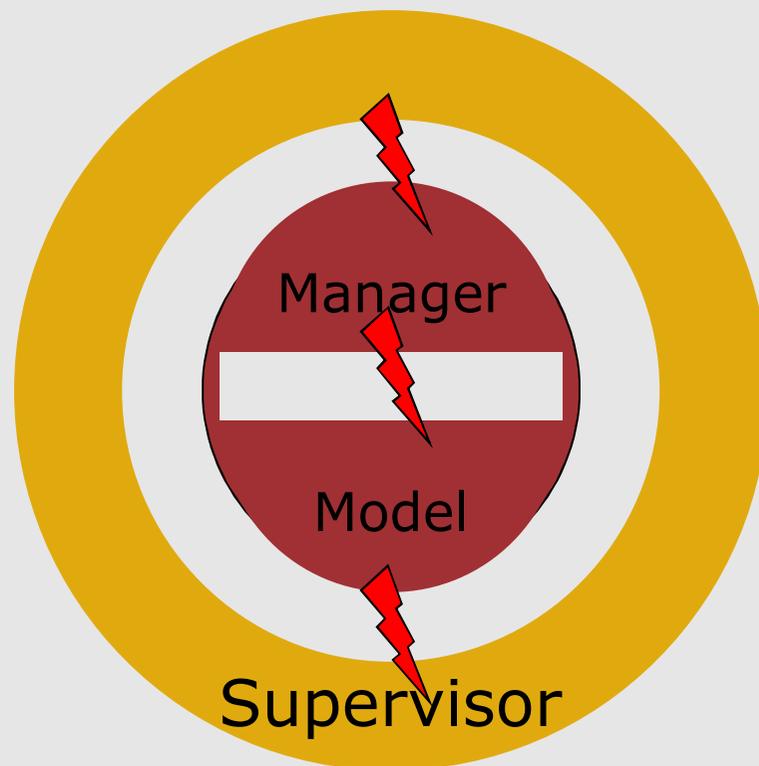
Supervisor

We love models.

Consequences of PBR

Paradigm shift for supervisors: Model must fit firm

1. Understand firm, its business model and risk profile

2. Judge appropriateness of internal model

The hard work is delegated from regulator to supervisor

▶ Interpret principles, apply them to the firm and model at hand

▶ Argue principles and interpretation in front of firm

Strong need for constant and intensive coordination between supervisors across firms and jurisdictions:

▶ to create common understanding of principles

▶ to ensure harmonized application of the principles

Synthesis between rules and principles

Sometimes regulatory rules are needed:

▶ "True" parameters may be unknown / unknowable
   (Example: ultimate forward rates)

▶ Parameters set by regulator achieve at least comparability and
   a level playing field

International cooperation ...

Driven by

▶ Europe-wide harmonized principles-based regulation

▶ legal structure of insurance companies

Instruments have been defined:

▶ CEIOPS working groups

▶ Joint company previsits

▶ CoCos, Colleges

▶ Preapplication process / Steering Committees

... is a team-building exercise!

Goals and challenges:

▶ Align mental models

▶ Inform and take along "peripheral" supervisors

▶ Promote active and open discussion with involved supervisors

▶ Create shared vision while guarding against groupthink

▶ Allocate tasks

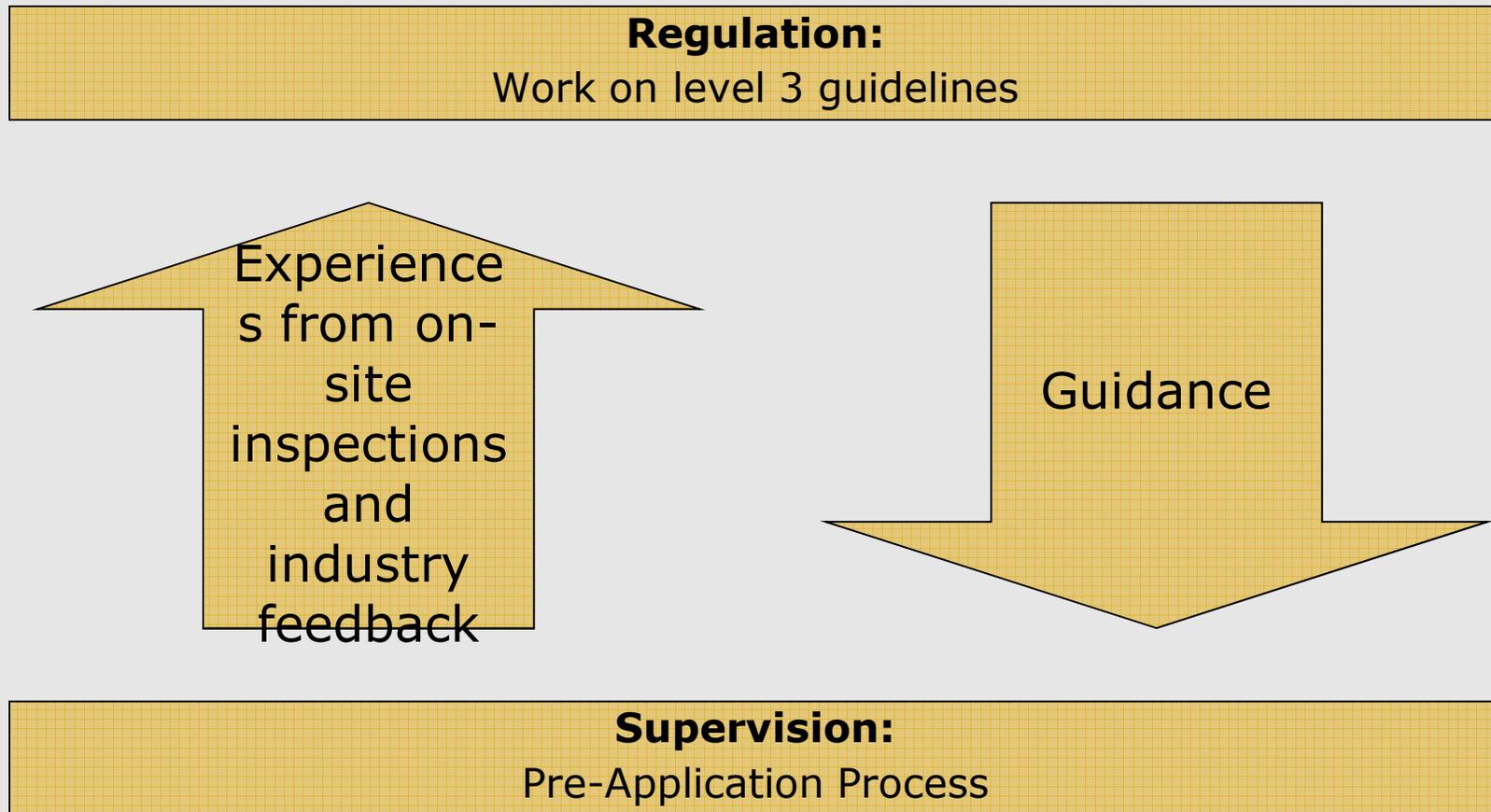# International supervisors need to form a team

Lencioni 2002:

Results

Accountability

Commitment

Conflict

Trust

Knowledge management ...

... is essential in the international supervisory community.

Challenge:

▶ Provide each supervisor with all relevant information

▶ while protecting necessary confidentiality

Ongoing dialogue

BaFin

Regulation:
Work on level 3 guidelines

Experiences from on-site inspections and industry feedback

Guidance

Supervision:
Pre-Application Process

Example: Expert Judgement

Definition? Differentiation from model assumptions?

Separate information basis from information processing

Governance!

▶ Assign responsibility for expert judgement

▶ Consistenly use information across the firm

Validation:

▶ The perception that EJ cannot be validated is ill-founded.

▶ However, different/more qualitative validation methods may have to be used.

EJ validation is different, but necessary

Uncertainty remains – but bias has been removed.

Example: Consistency…

… between models for valuation and risk calculation.

Interpretation of „consistency"?

Aspects

▶ What is calculated?

▶ How is it calculated? Model assumptions, methods etc.

▶ Which data sources are used?

▶ Coverage?

▶ Other topics…

Thank you!

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