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# Credit and Risk Management in a Wind-Down Agency

Christian Bluhm

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**AK Strategieentwicklung und Controlling in Banken**

Schmalenbach-Gesellschaft, Frankfurt am Main, 22.09.2011

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## Agenda

- **The influence of the 2007/2008 financial crisis**
- **FMS Wertmanagement: a public wind-down agency**
- **Active CPM at FMS Wertmanagement**
- **Chances and challenges, outlook and perspectives**



## Agenda

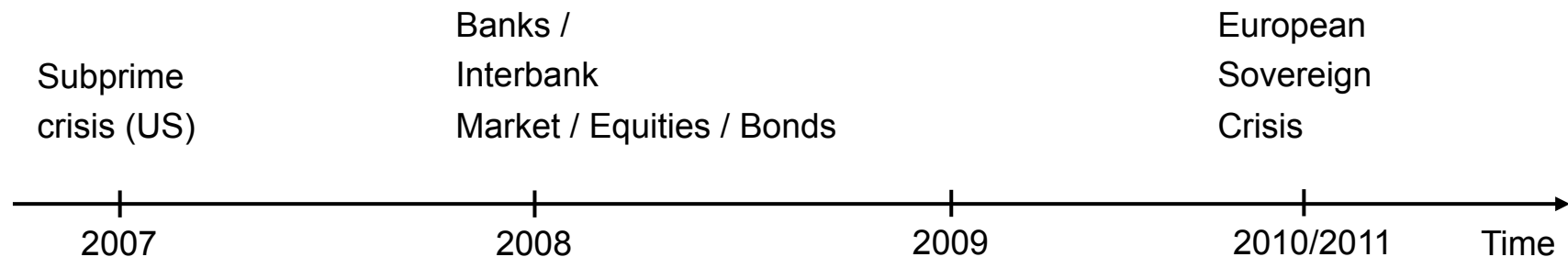
- **The influence of the 2007/2008 financial crisis**
- FMS Wertmanagement: a public wind-down agency
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# The 2007/2008 financial crisis initiated huge market and economic irritations ... nowadays ongoing



Lehman Brothers  
(Source: Bloomberg, Sept-2008)

Real Economy / Markets & Banks again ...  
Currencies



In the course of the crisis, Germany established the “Finanzmarktstabilisierungsgesetz” (**FMStG**) including the (Article 1) “Finanzmarktstabilisierungsfondsgesetz” (**FMStFG**) effective as of October 17 in 2008.

Purpose: **stabilization of German financial institutions and avoidance of a credit crunch.**



## Aim of this presentation

- Introduce the public law agency "FMS Wertmanagement"
- Explain benefits and mandate as well as structure and organization
- Exploit the operating model of FMS Wertmanagement
- Provide examples for portfolio management activities of FMS Wertmanagement
- Explain chances and challenges in daily business





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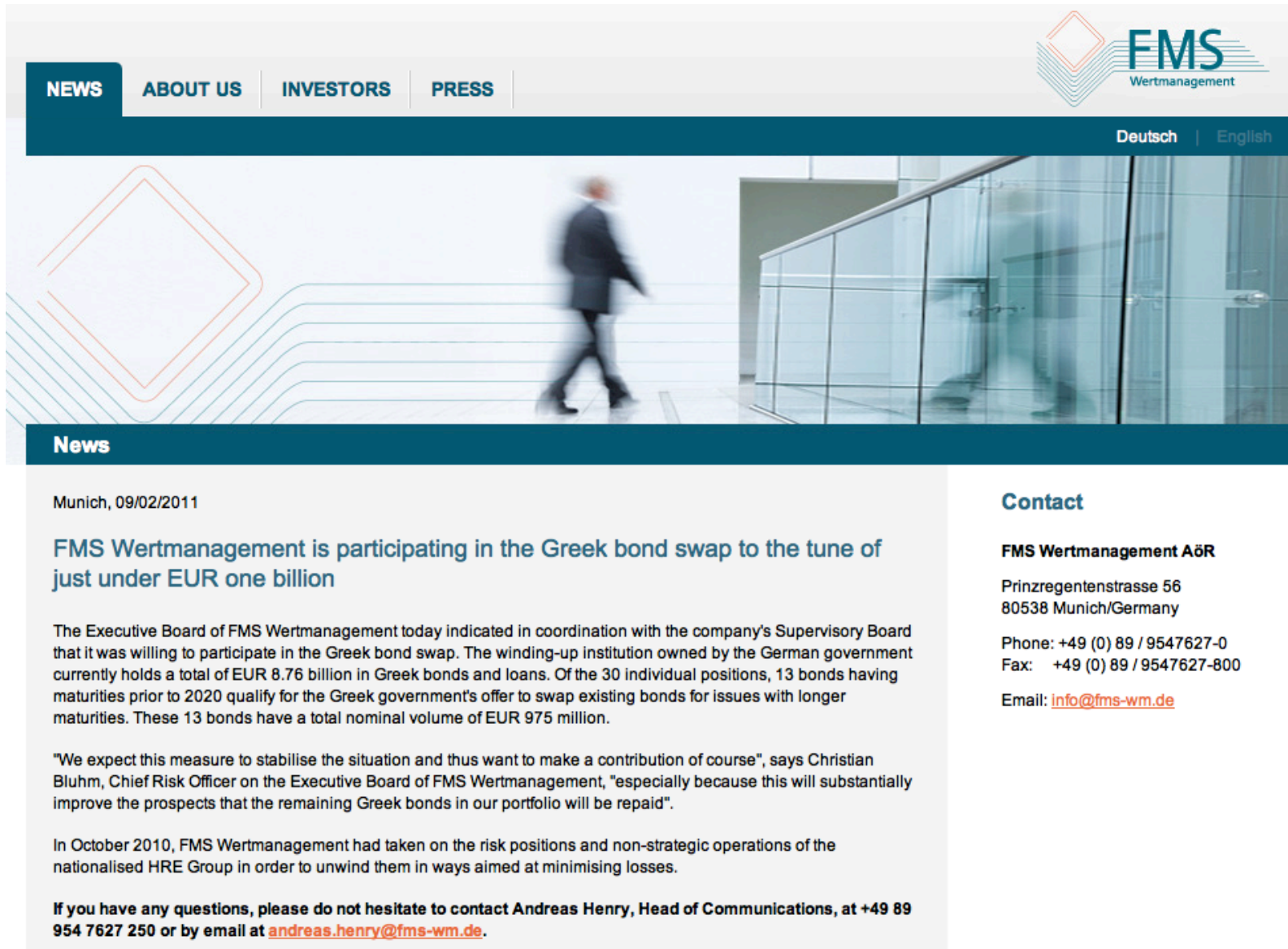


## Genesis of FMS Wertmanagement

September 2008	• The HRE Group encounters such serious financial difficulties that it faces going-concern risks
17 October 2008	• The Parliament of the Federal Republic of Germany moves to establish SoFFin based on the FMStFG dated 17 October 2008
13 October 2009	• SoFFin acquires full control of the HRE Group
21 January 2010	• The HRE Group applies for establishment of a winding-up institution
8 July 2010	• FMS Wertmanagement is founded as an entity under public law pursuant to Section 8a FMStFG
30 September 2010	• Both the non-strategic operations and the risk positions of the HRE Group are transferred to FMS Wertmanagement at a nominal value of EUR 175.7 billion
1 October 2010	• FMS Wertmanagement launches its operations

Source: FMS Wertmanagement, Annual Report 2010

## Public online information regarding FMS Wertmanagement



The screenshot shows the FMS Wertmanagement website. The header includes a navigation menu with 'NEWS', 'ABOUT US', 'INVESTORS', and 'PRESS'. The FMS Wertmanagement logo is in the top right corner. Below the header is a large banner image showing a blurred figure of a person walking in a modern office setting. A 'News' section is highlighted in a dark blue bar. The main content area displays a news article dated 'Munich, 09/02/2011' with the headline 'FMS Wertmanagement is participating in the Greek bond swap to the tune of just under EUR one billion'. The article text describes the company's participation in the swap, mentioning the Greek government's offer and the company's portfolio. A quote from Christian Bluhm, Chief Risk Officer, is included. The article also mentions the company's previous actions in October 2010. Contact information for FMS Wertmanagement AöR is provided on the right side of the page.

**NEWS** ABOUT US INVESTORS PRESS

Deutsch | English

**News**

Munich, 09/02/2011

**FMS Wertmanagement is participating in the Greek bond swap to the tune of just under EUR one billion**

The Executive Board of FMS Wertmanagement today indicated in coordination with the company's Supervisory Board that it was willing to participate in the Greek bond swap. The winding-up institution owned by the German government currently holds a total of EUR 8.76 billion in Greek bonds and loans. Of the 30 individual positions, 13 bonds having maturities prior to 2020 qualify for the Greek government's offer to swap existing bonds for issues with longer maturities. These 13 bonds have a total nominal volume of EUR 975 million.

"We expect this measure to stabilise the situation and thus want to make a contribution of course", says Christian Bluhm, Chief Risk Officer on the Executive Board of FMS Wertmanagement, "especially because this will substantially improve the prospects that the remaining Greek bonds in our portfolio will be repaid".

In October 2010, FMS Wertmanagement had taken on the risk positions and non-strategic operations of the nationalised HRE Group in order to unwind them in ways aimed at minimising losses.

**If you have any questions, please do not hesitate to contact Andreas Henry, Head of Communications, at +49 89 954 7627 250 or by email at [andreas.henry@fms-wm.de](mailto:andreas.henry@fms-wm.de).**

**Contact**

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## Mandate of FMS Wertmanagement



**Intake of risk positions and non-strategic assets, liabilities and derivatives** from HRE Group



**Value-maximising management** and **wind-down of transferred assets** and **implementation** of an appropriate **wind-down strategy** for the whole portfolio



**Cost-effective management** of transferred assets, liabilities and derivatives



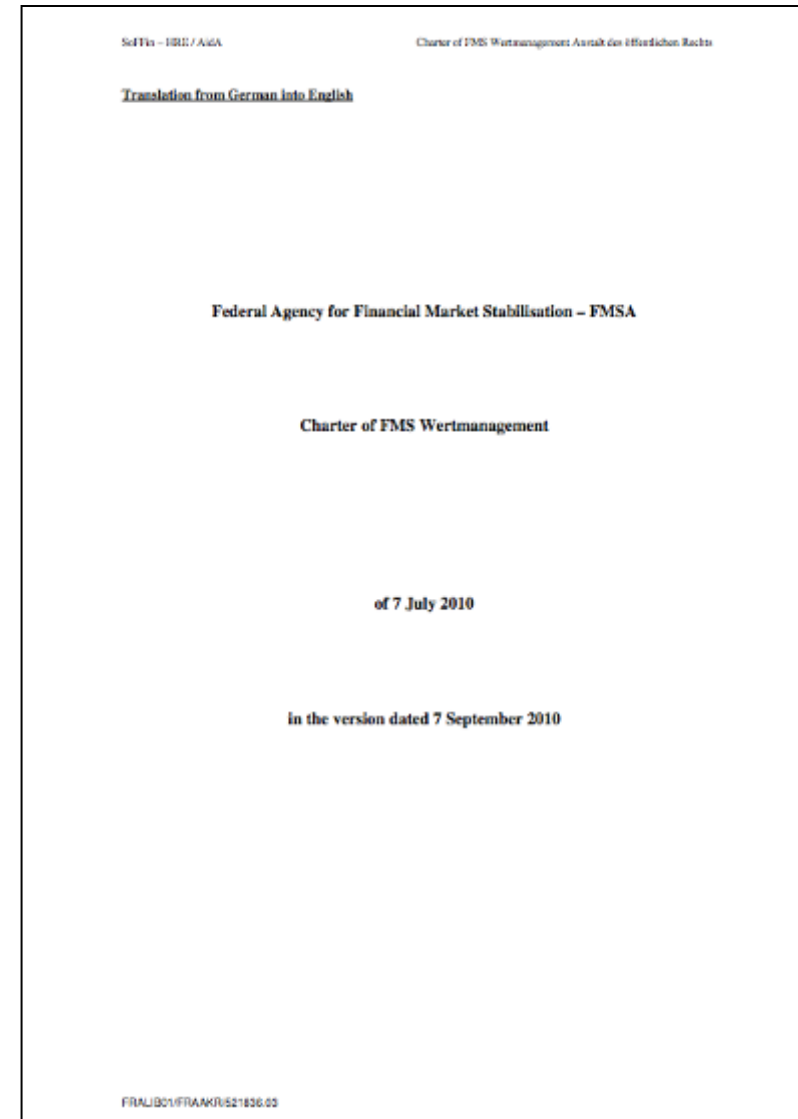
**Cost-effective funding** through **independent** treasury function and low funding costs due to obligation of Financial Market Stabilisation Fund (SoFFin) to compensate all losses of FMS Wertmanagement

## Basis: charter of FMS Wertmanagement

Basis for FMS Wertmanagement, its mandate and business model is a **charter**/statute as of 7 July 2010

The charter of FMS Wertmanagement was enacted by the Federal Agency for Financial Market Stabilization (**FMSA**) which is being supervised by the German Ministry of Finance

**SoFFin** (Sonderfonds Finanzmarktstabilisierung) is the financial arm of the FMSA



## Extracts from the charter of FMS Wertmanagement (1/3)

### **Section 1      Formation, legal form, registered office**

(1) On the date on which this charter enters into force, FMS Wertmanagement shall be established as a structurally and financially independent public law entity with partial legal capacity operating under the auspices of the Federal Agency for Financial Market Stabilisation (Bundesanstalt für Finanzmarktstabilisierung, "FMSA"). FMS Wertmanagement is a winding-up agency within the meaning of section 8a (1) sentence 1 FMStFG.

(2) FMS Wertmanagement may engage in legal transactions in its own name, and it may sue and be sued in court.

(3) FMS Wertmanagement's registered office is Munich.

(4) FMS Wertmanagement may establish commercial branches (*Betriebsstätten*), specifically in Frankfurt am Main/Eschborn.

Source: Charter of FMS Wertmanagement (non-binding English translation)

## Extracts from the charter of FMS Wertmanagement (2/3)

### **Section 2 Functions, transactions, application of the Banking Act**

(1) FMS Wertmanagement shall be responsible for assuming, liquidating and winding-up with a view to generating a profit the risk assets and non-strategic businesses ("Transferred Assets") of Hypo Real Estate Holding AG and its directly and indirectly held German and foreign subsidiaries and special purpose entities (collectively referred to as the "**HRE Group**") for the purpose of stabilising the HRE Group and the financial market.

(2) In order to perform its function described in subsection 1, FMS Wertmanagement may engage in all types of banking and financial services transactions and all other transactions that directly or indirectly serve its purposes. The foregoing does not affect subsection 3 sentence 1 no. 2. FMS Wertmanagement's business activities shall extend to all assets and liabilities among the Transferred Assets.

(3) FMS Wertmanagement:

1. is not a financial institution (*Kreditinstitut*) or financial services institution (*Finanzdienstleistungsinstitut*) within the meaning of the Banking Act (*Kreditwesengesetz*, "KWG"), an investment services enterprise (*Wertpapierdienstleistungsunternehmen*) within the meaning of the Securities Trading Act (*Wertpapierhandelsgesetz*, "WpHG"), or an insurance company (*Versicherungsunternehmen*) within the meaning of the Insurance Supervisory Act (*Versicherungsaufsichtsgesetz*, "VAG");

Source: Charter of FMS Wertmanagement (non-binding English translation)





## Extracts from the charter of FMS Wertmanagement (3/3)

### **Section 7      Duty of loss compensation**

(1) Until the dissolution of FMS Wertmanagement pursuant to section 16, SoFFin shall be under an obligation to FMS Wertmanagement and FMSA to do or to cause the following:

1. to promptly, however not later than the third business day following the first request of the Executive Board (if applicable, even prior to maturity of FMS Wertmanagement's liabilities), pay those amounts which the Executive Board in its due discretion deems necessary in order to ensure that FMS Wertmanagement is always in a position to meet its liabilities in full and in a timely manner, i.e., SoFFin shall be liable to FMS Wertmanagement and FMSA for the liabilities entered into by FMS Wertmanagement;
2. to compensate all losses. Losses within the meaning of this provision are all amounts due and payable under no. 1 and not (any longer) repayable in accordance with subsection 2.

The Executive Board of FMS Wertmanagement is under the obligation to request additional funding within the meaning of no. 1 in the requisite amount and in a timely fashion in order to ensure that FMS Wertmanagement is able to meet any and all payment obligations at all times.

Source: Charter of FMS Wertmanagement (non-binding English translation)



## Cheap funding costs for FMS-WM enabled by SoFFin's loss compensation obligation

Based on loss compensation by the SoFFin, FMS Wertmanagement achieved **best-in-class ratings**

Highest credit rating: AAA/Aaa/AAA rating			
Rating agency	Long-term rating	Short-term rating	Outlook
Fitch Ratings	AAA	F1+	Stable
Moody's	Aaa	P-1	Stable
Standard & Poor's	AAA	A-1+	Stable

The creditworthiness of FMS Wertmanagement equals the creditworthiness of the Federal Republic of Germany

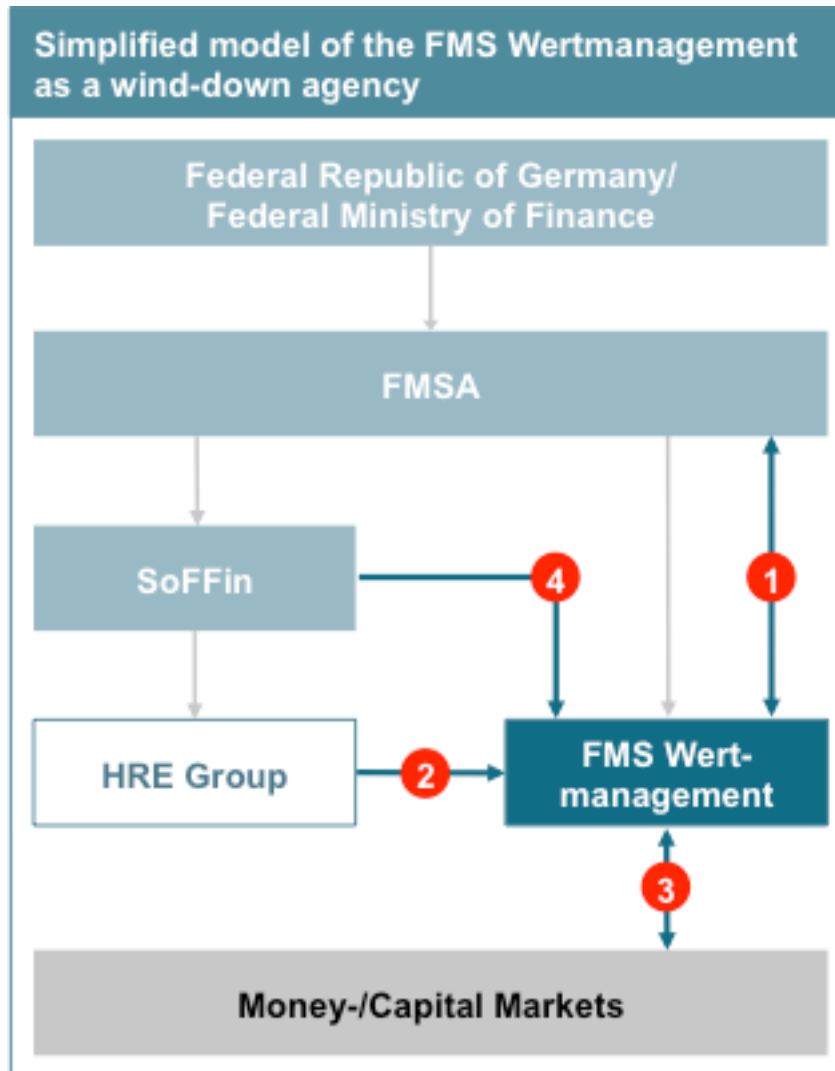
As a consequence, FMS Wertmanagement can **fund itself at low costs**



## **Summary:** legal and regulatory framework of FMS Wertmanagement

- Organisation as a **legally and economically independent public-law wind-down entity**
- FMS Wertmanagement can act **under its own name in legal transactions**
- **Regulation and supervision** by the Financial Market Stabilisation Agency (**FMSA**) and the Federal Financial Supervisory Authority (**BaFin**)
- FMS Wertmanagement **not considered to be a credit institution** or **financial services institution** under the German Banking Act (KWG)
- According to law and the charter, all **losses** of FMS Wertmanagement are **covered** by the Financial Market Stabilisation Fund (SoFFin)
- FMS Wertmanagement entitled to **conduct certain banking and financial services business** related to winding-down the transferred asset portfolio without banking licence
- Liquidation and wind-down of transferred assets to be conducted in **accordance with a wind-down plan**, designed for a period of 10 years (with regular **monitoring reports** for FMSA)

## Summary: relation to FRG, FMSA, SoFFin and HRE



### Cornerstones

#### 1 Governance

- FMSA has decreed a charter for FMS Wertmanagement (FMS-WM), which governs the organisation, liquidation, supervision and governance etc.
- Regular reporting about business development by FMS-WM to FMSA

#### 2 Asset Transfer & Servicing

- Transfer of assets, liabilities and derivatives from HRE Group to FMS-WM
- Assets include non-strategic and risk carrying positions
- Servicing by HRE Group

#### 3 Risk management, funding and hedging

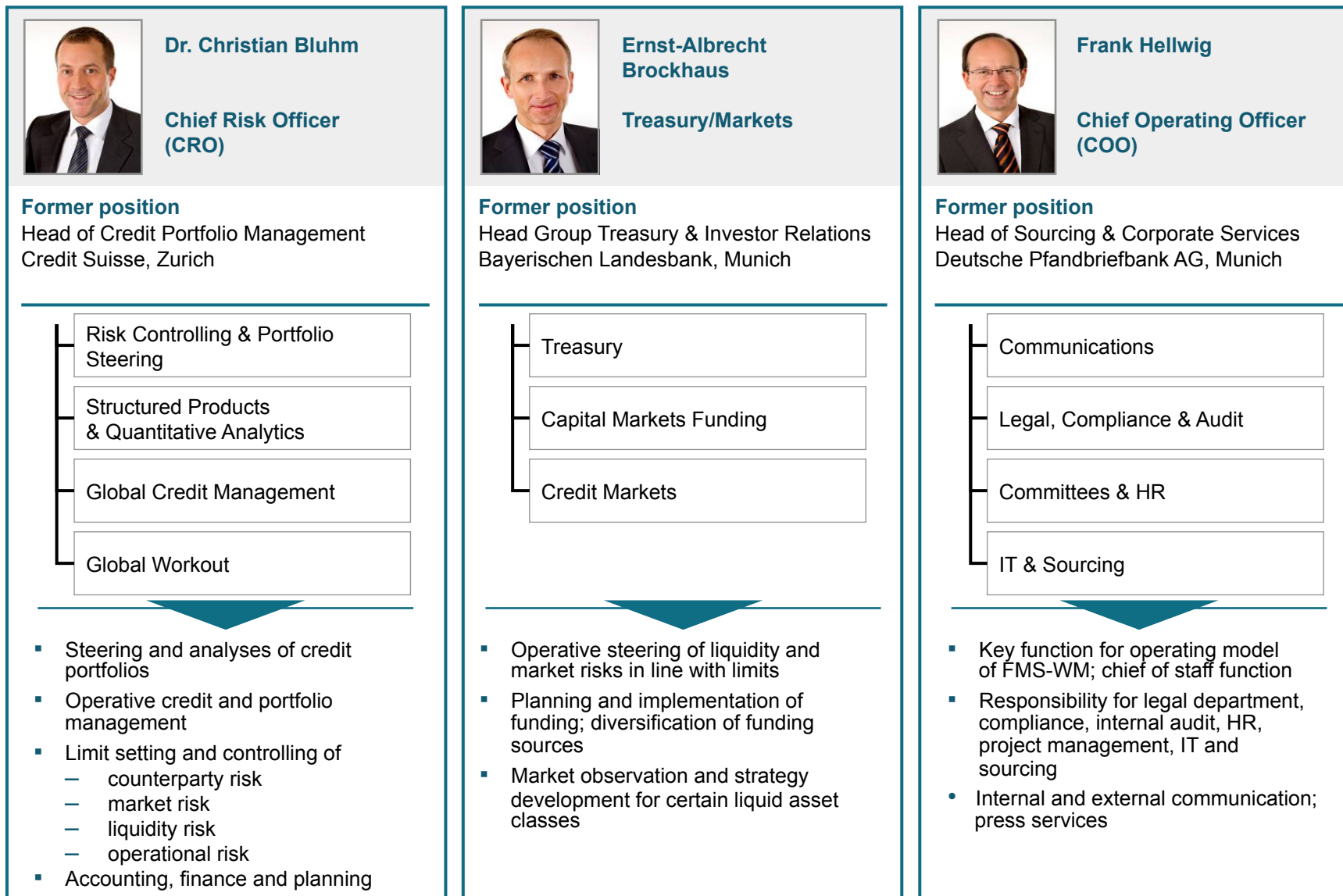
- Refinancing of FMS-WM via capital market issues and bilateral repos, etc.
- Management of liquidity-, interest rate- and currency risks via Money-/Capital Markets

#### 4 Covering of losses

- SoFFin to cover losses of FMS-WM

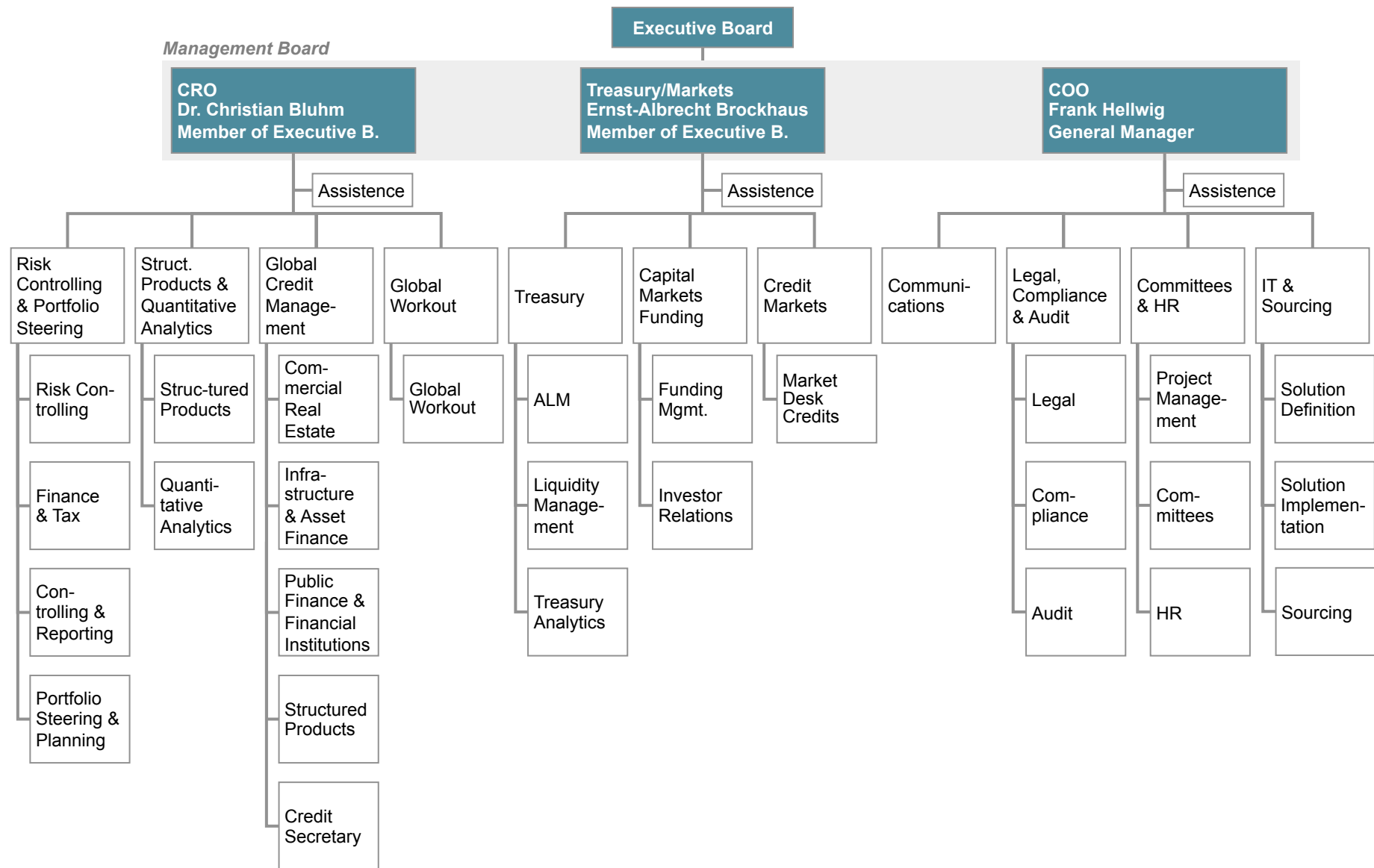


## Organizational structure of FMS Wertmanagement (1/2)





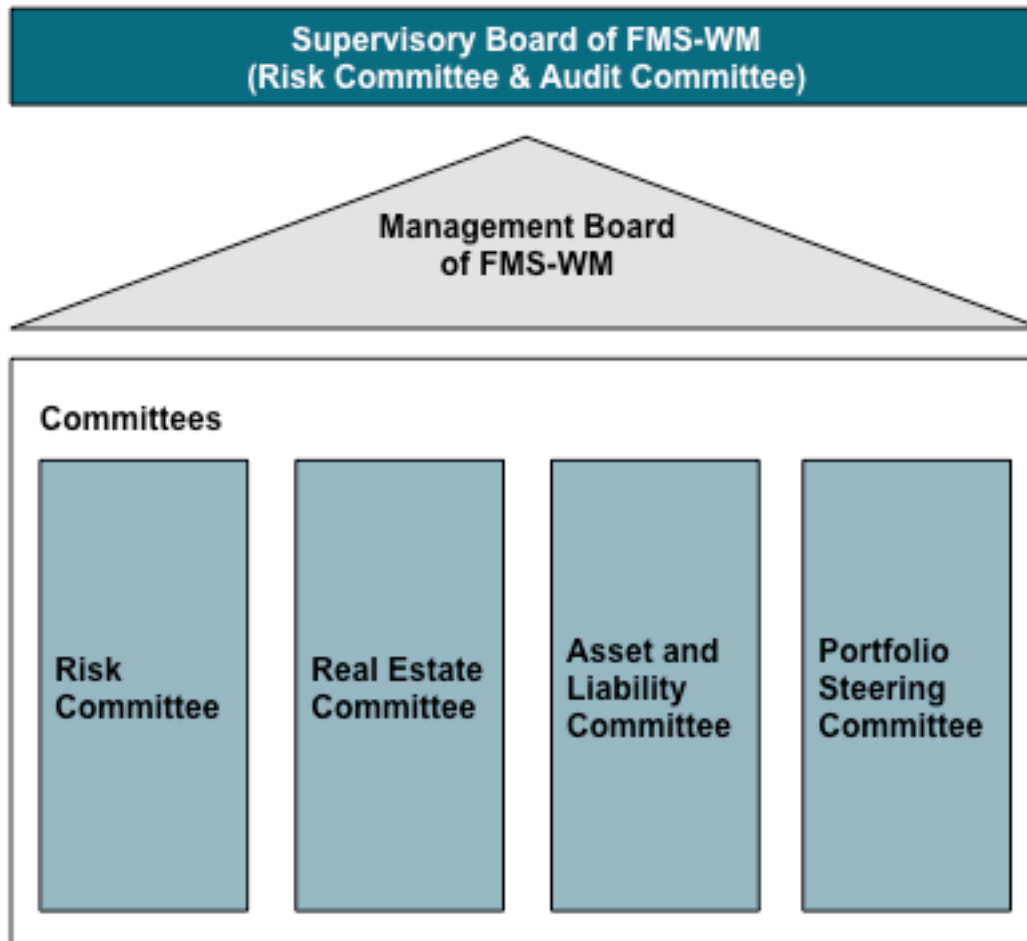
## Organizational structure of FMS Wertmanagement (2/2)





## Committees & governance

### Overview of Committees



### Duties of Committees

- Approval of material single-name and portfolio decisions; strategy decisions;
  - Supervision of management of FMS-WM
  - Heading FMS-WM
  - Operative overall responsibility
- 
- Single-name and portfolio decisions w.r.t. competence rules
  - Funding strategy
  - Portfolio steering strategy
  - Responsibility of risks in line with MARisk



## Organizational principles

- Organization complies with **MARisk** standards
- Governance and processes reflect **independence of market and risk units**
- Lean structure, steering and **material decisions fully integrated in FMS-WM**  
but execution and other services can be done by **external service providers**
- Setup could be subject to changes over time; organization serves the  
**purpose and mandate of FMS-WM in line with its charter**; best effort, efficiency  
and **value maximization** are main drivers as well as compliance with regulation

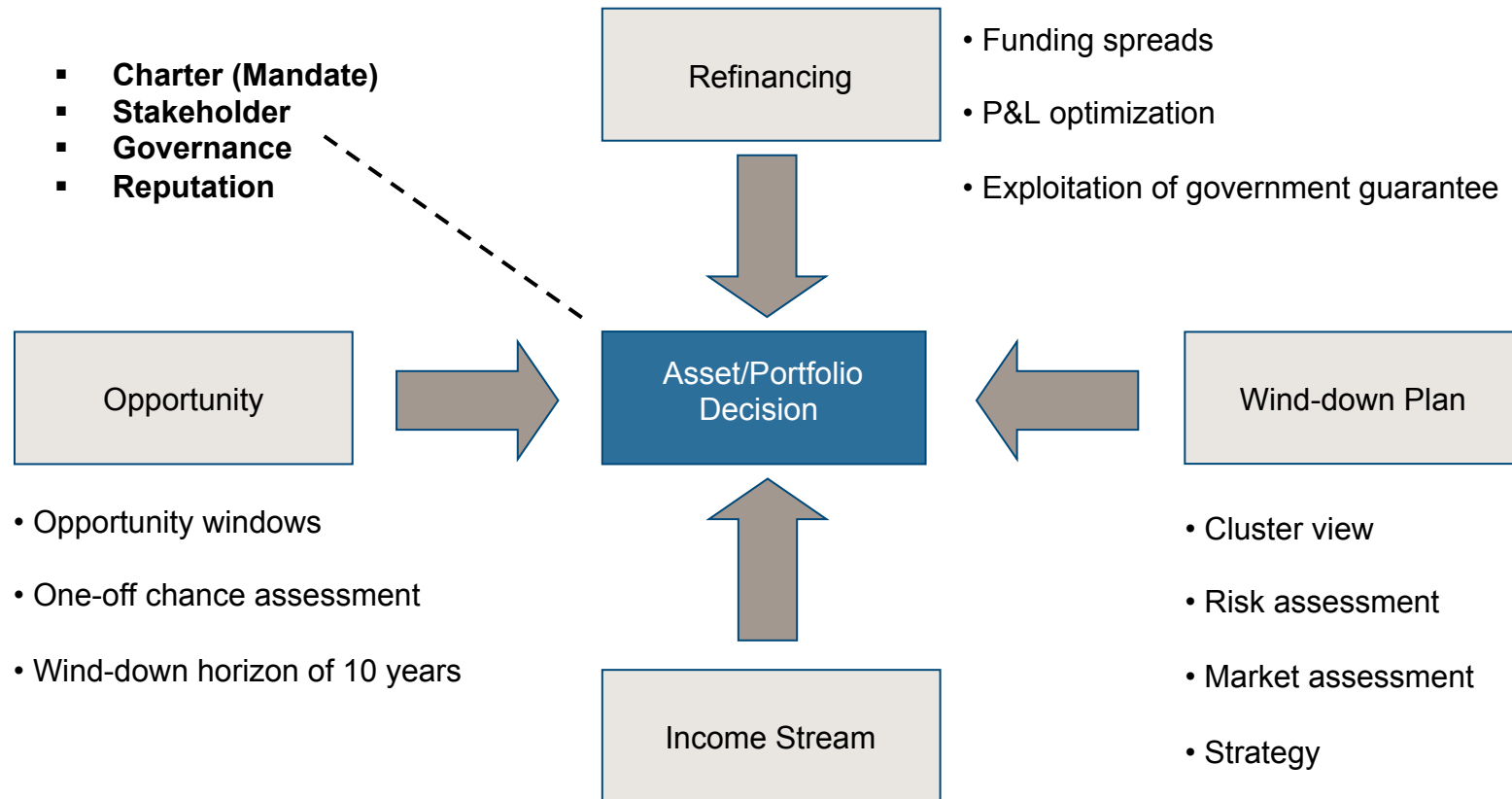


## Agenda

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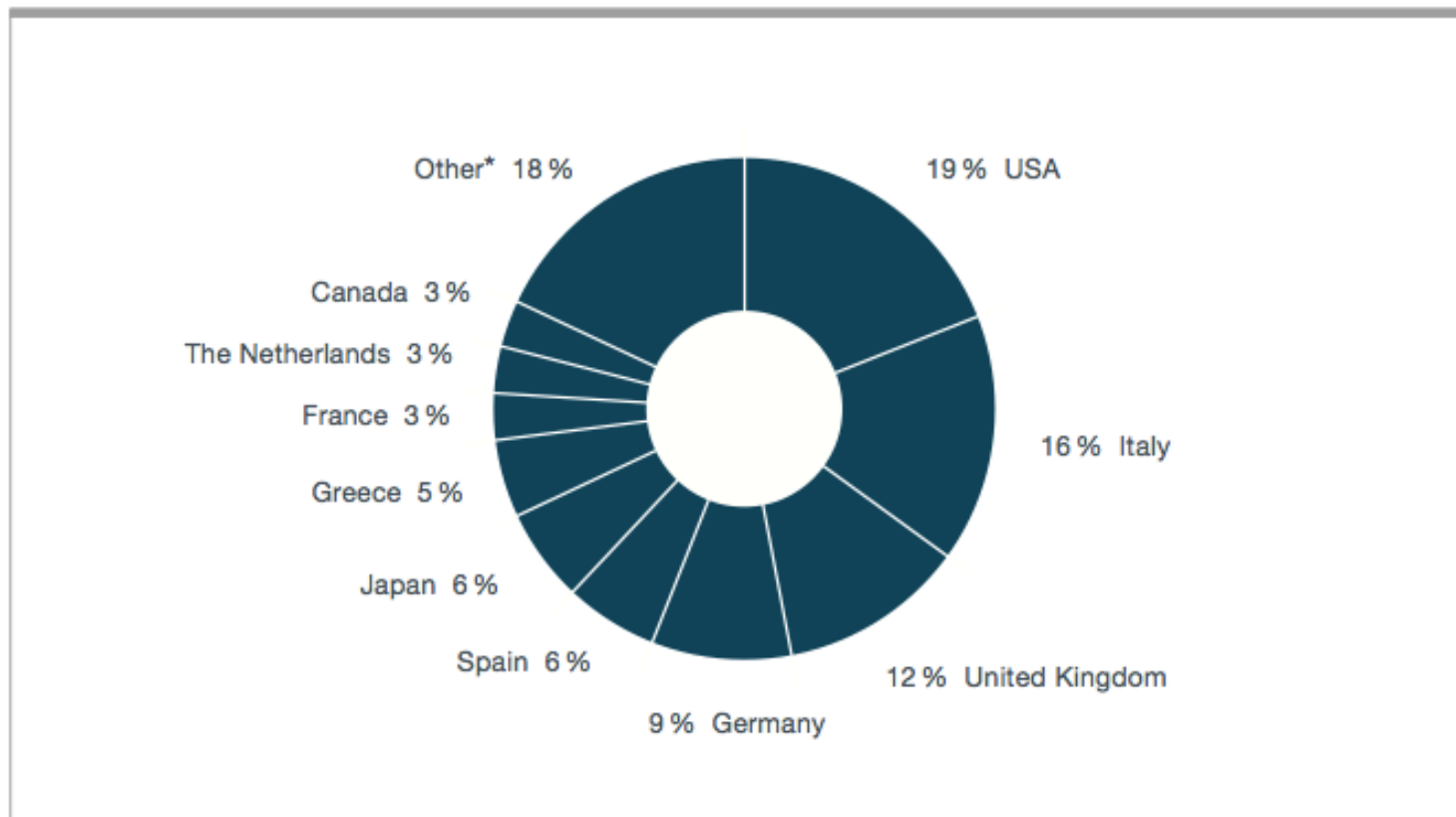
## Value and decision drivers in CPM at FMS-WM





## Portfolio structure (1/6) – geographical breakdown (as of Dec-31-2010)

*Portfolio structure*  
*Geographical distribution in % of the nominal values on 31 December 2010*



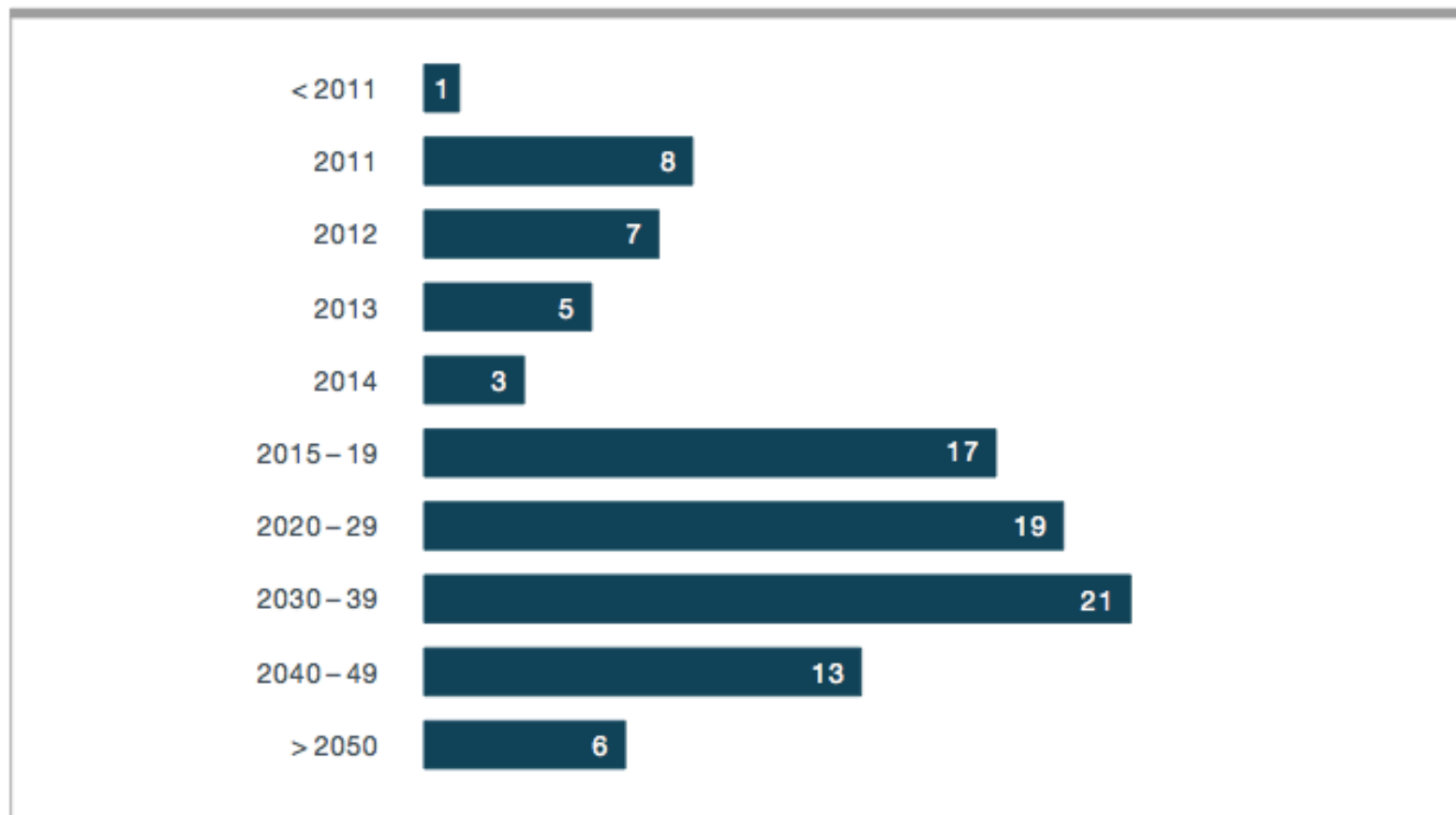
\* Other 50 countries with an exposure of less than 2 % each

Source: FMS Wertmanagement, Annual Report 2010



## Portfolio structure (2/6) – maturity breakdown (as of Dec-31-2010)

*Portfolio structure – maturities (without extensions) in %*



Source: FMS Wertmanagement, Annual Report 2010





## Portfolio structure (3/6) – rating breakdown (as of Dec-31-2010)

31.12.2010 EAD (in € billion)	Commercial Real Estate/Workout	Value Management (Public Sector/ Structured Products)	Infrastructure	Total
<b>Total</b>	<b>26.2</b>	<b>139.8</b>	<b>21.0</b>	<b>187.0</b>
AAA to A–	0.4	118.0	8.4	126.8
BBB+ to BBB–	1.3	17.5	4.4	23.2
BB+ to BB–	7.2	2.2	3.8	13.2
B+ to B–	8.2	0.6	1.0	9.9
CCC+ to CCC–	0.3	0.6	0.2	1.1
D	8.8	0.8	3.2	12.8

Source: FMS Wertmanagement, Annual Report 2010



## Portfolio structure (4/6) – geographical EAD breakdown (as of Dec-31-2010)

31.12.2010 EAD (in € billion)		Commercial Real Estate/ Workout	Value Management (Public Sector/ Structured Products)	Infrastructure	Total
<b>Total portfolio</b>		<b>26.2</b>	<b>139.8</b>	<b>21.0</b>	<b>187.0</b>
Germany		9.0	6.9	0.4	16.3
USA		5.1	24.4	2.2	31.7
United Kingdom		2.3	11.5	10.4	24.2
PIIGS	Italy	0.5	33.4	0.7	34.6
	Spain	1.1	10.3	0.4	11.8
	Greece	0	10.8	0	10.8
	Ireland	0.1	2.2	0.2	2.5
	Portugal	0.1	2.2	0.1	2.4
Japan		0.6	10.0	0.1	10.7
Asia (excl. Japan)		0.6	2.6	0.3	3.5
Rest of Europe		6.1	21.4	1.6	29.2
Rest of World		0.7	4.0	4.6	9.3

Source: FMS Wertmanagement, Annual Report 2010



## Portfolio structure (5/6) – maturity EAD breakdown (as of Dec-31-2010)

31.12.2010 EAD (in € billion)	Commercial Real Estate/Workout	Value Management (Public Sector/ Structured Products)	Infrastructure	Total
<b>Total portfolio</b>	<b>26.2</b>	<b>139.8</b>	<b>21.0</b>	<b>187.0</b>
2011–2015	19.8	23.3	4.0	47.1
2016–2020	1.1	27.7	1.3	30.1
2021–2030	1.3	28.7	2.8	32.8
2031–2040	0.7	39.3	3.7	43.7
>2040	1.4	20.8	9.2	31.4
n.a.*	1.9	0	0	1.9

\* Including loans called or loans where extensions are being processed

Source: FMS Wertmanagement, Annual Report 2010



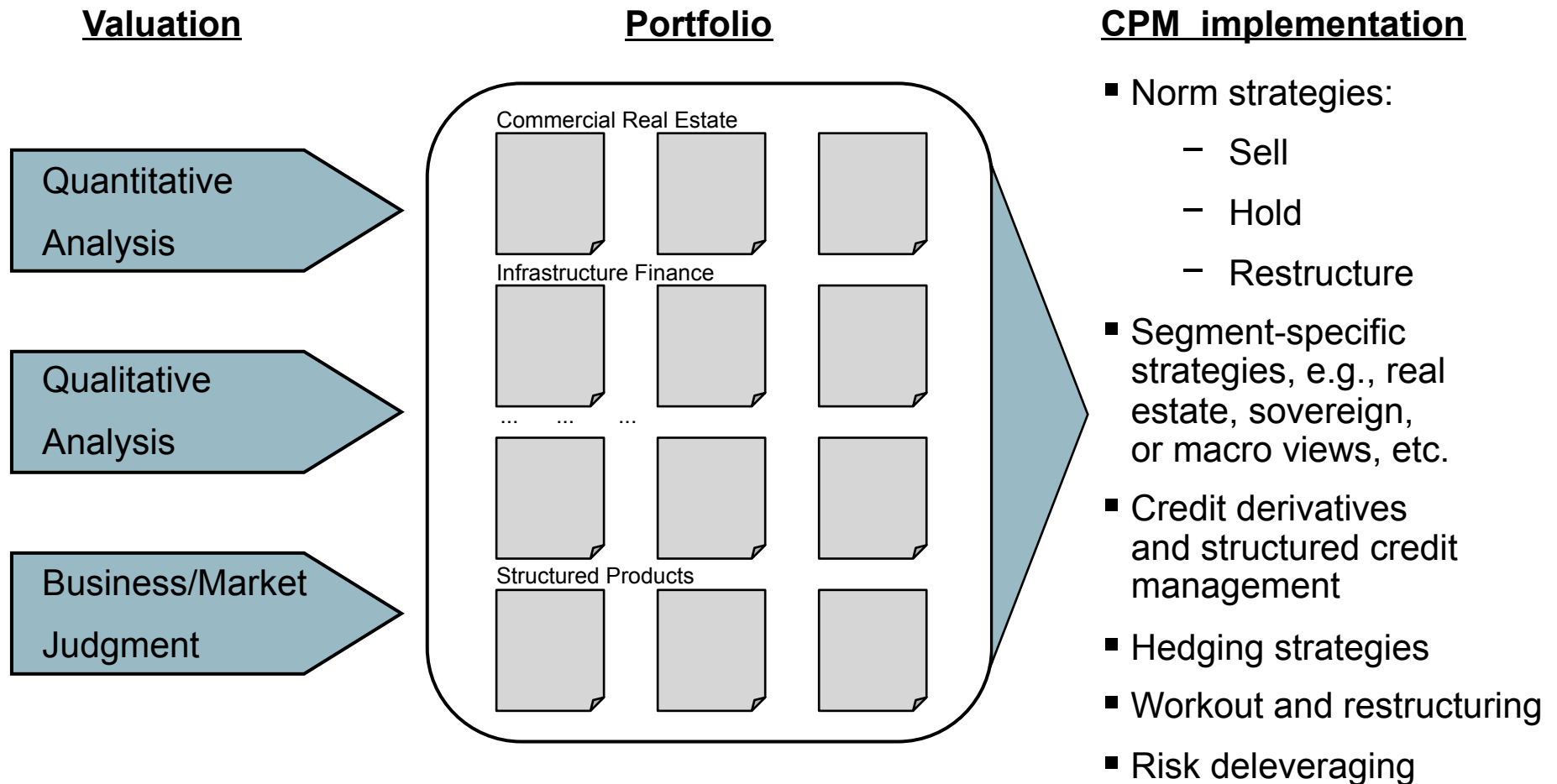
## Portfolio structure (6/6) – valuation breakdown (as of Dec-31-2010)

€ million	Of which: public-sector issuers	Of which: banks	Of which: other issuers	Total
Book value	62,430	11,648	51,275	125,353
Fair value	46,750	10,331	43,614	100,695
Deferred write-downs in fixed assets	15,346	1,231	7,850	24,427
of which: asset-backed securities				2,443
of which: PIIGS countries				14,519
Portugal				(437)
Ireland				(365)
Italy				(7,655)
Greece				(4,717)
Spain				(1,345)

Source: FMS Wertmanagement, Annual Report 2010



## Mandate of FMS Wertmanagement enforces active CPM



**CPM at FMS-WM incorporates four units: Structured Credit + CRM<sup>1</sup> + GWO<sup>2</sup> + Credit Markets**

<sup>1</sup> CRM: Credit Risk Management    <sup>2</sup> GWO: Global Workout



## General CPM principles at FMS-WM

- Qualitative and quantitative assessment of risks and chances is the first step
- Opportunity assessment comes next
- No material sale without a fully-fledged business case with a full valuation of options and a reasonable bottom-line comparison of outcomes
- Exploitation of pull-to-par effect for assets with maturity before wind-down horizon if risk assessment provides confidence that assets remain performing
- No acceptance of loss arising from sale without clear reasoning; arguments often will contain qualitative aspects but must be made firm and quantitative
- Documentation of sales decision is key: legal assessment always has to be in place (internal always; external on need-to-have basis)
- Charter & reputation is key



## Examples: commercial real estate

- **Restructuring**
  - Capital structure
  - Waterfall / distribution of proceeds
  - Coverage ratios / debt service
  - Change of sponsor
  - Property management
- **Sale**
  - Bidding process
  - No fire sales / no pressure
  - Value maximizing
  - Within predefined loss budgets\*
- **Prolongation / Hold**
  - In case of clear proof of evidence that prolongation/hold maximizes the recovery/sale value later in time
  - If overall risk can be improved in favor of FMS Wertmanagement
  - If other options would accelerate losses

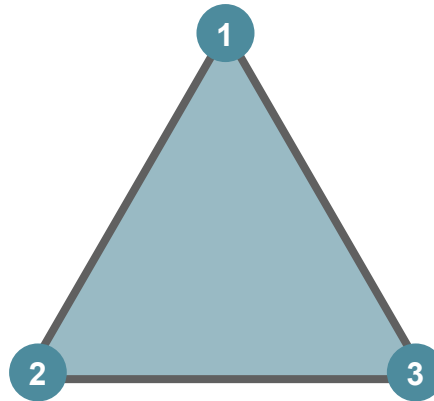


\* Main steering instrument and benchmark is the afore-mentioned **wind-down plan** and the **governance framework** around it

## Portfolio and asset management steering criteria

### Three main fields of decision criteria

**Economic value maximization** via balancing **market** versus **intrinsic** asset value under consideration of **risk/return** profile as well as market segment and **market development**



- **Transparency:** all aspects, all risk drivers, full understanding
- **Full compliance** with mandate and all regulatory requirements
- **Stakeholder demand / management**

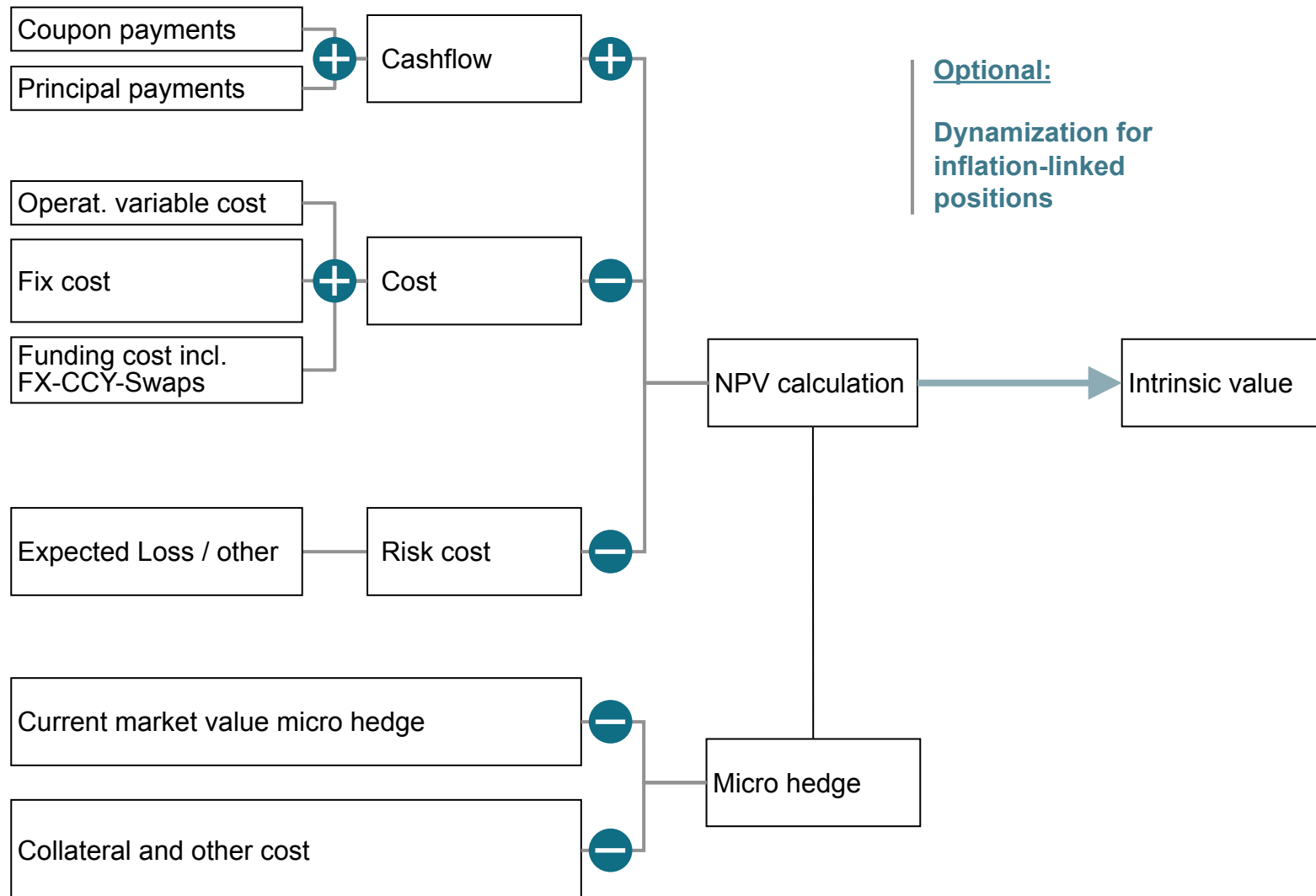
**Bottom-line** valuation of positive and negative expected cash; cumulative **P&L** result including **scenario** analysis and upside **chances** as well as downside **risks**; concentrations, macro developments, reputation, political aspects, stakeholder demand

**Operative capabilities** for execution; transaction costs; operative **complexity**; **strategic** goals; simplification and **clean-up** aspects





## Example: simplified scheme intrinsic bond sale



## Examples: structured credit

### Valuation

- Reference pool
- Structure
- Securities
- Payments
- Performance
- Risk drivers
- Stochastics

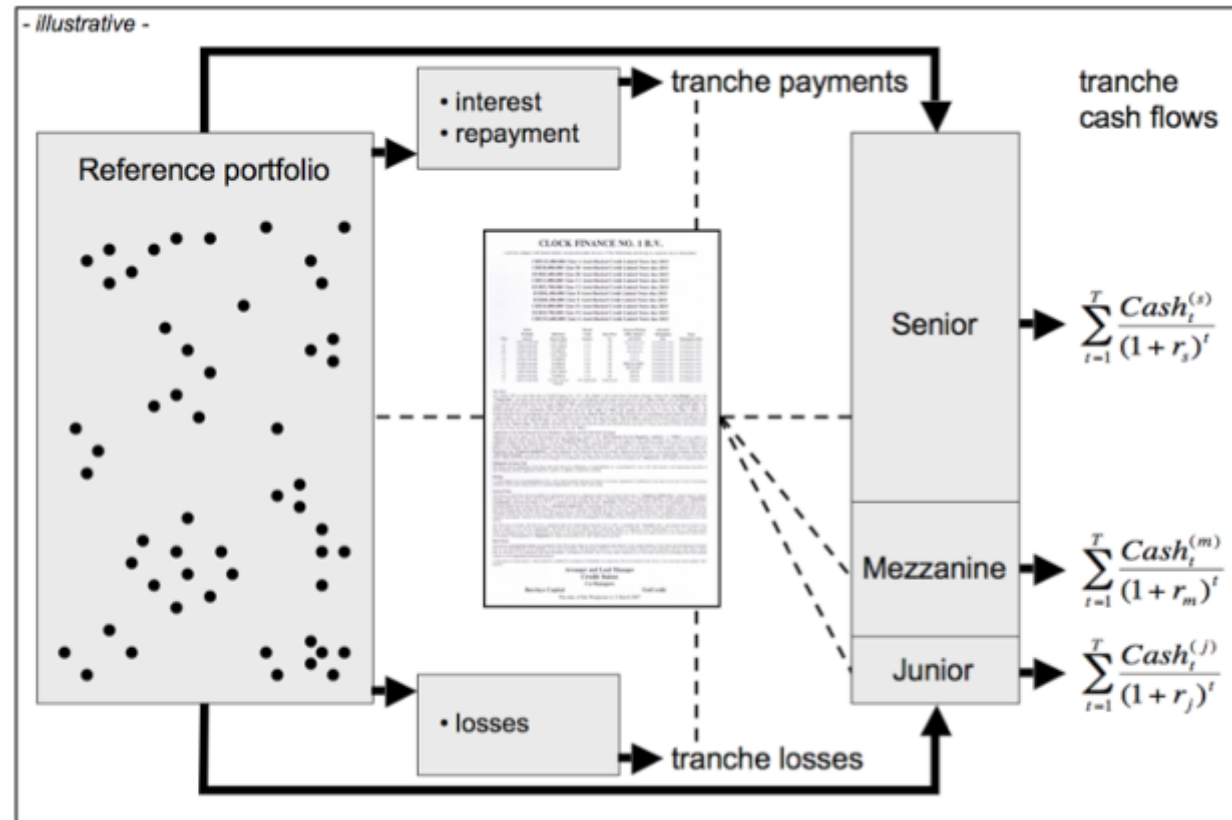
### Deleveraging volume

### Deleveraging risk

### Additional hedging

### Collaboration with market participants

- Who else is involved?
- Do we have common interest in managing positions, risks, structures?
- What experience did other institutions make with considered structures?
- What is the market view regarding perspectives going forward?



## Examples: transaction valuation

Standard **credit risk** model and **cash flow modeling** as basic building blocks

$$\mathbf{1}_{\{\tau_i < t\}} \sim B(1; X_i^{(t)}), \quad (\mathbf{1}_{\{\tau_i < t\}} |_{X_i^{(t)} = \chi_i})_{i=1, \dots, m} \text{ independent}$$

$$(X_i^{(t)})_{i=1, \dots, m} \text{ r.v. in } [0, 1]^m \text{ on a probability space } (\Omega, \mathcal{F}, \mathbb{P})$$

$$\mathbb{E}[X_i^{(t)}] = p_i^{(t)}, \quad (p_i^{(t)})_{t \geq 0} \text{ PD term structure for asset } i$$

$$\mathbb{P}[\tau_1 < t_1, \dots, \tau_m < t_m] = \int_{[0,1]^m} \left( \prod_{i=1}^m \chi_i \right) d\mathbb{P}_{(X_1^{(t_1)}, \dots, X_m^{(t_m)})}(\chi_1, \dots, \chi_m)$$

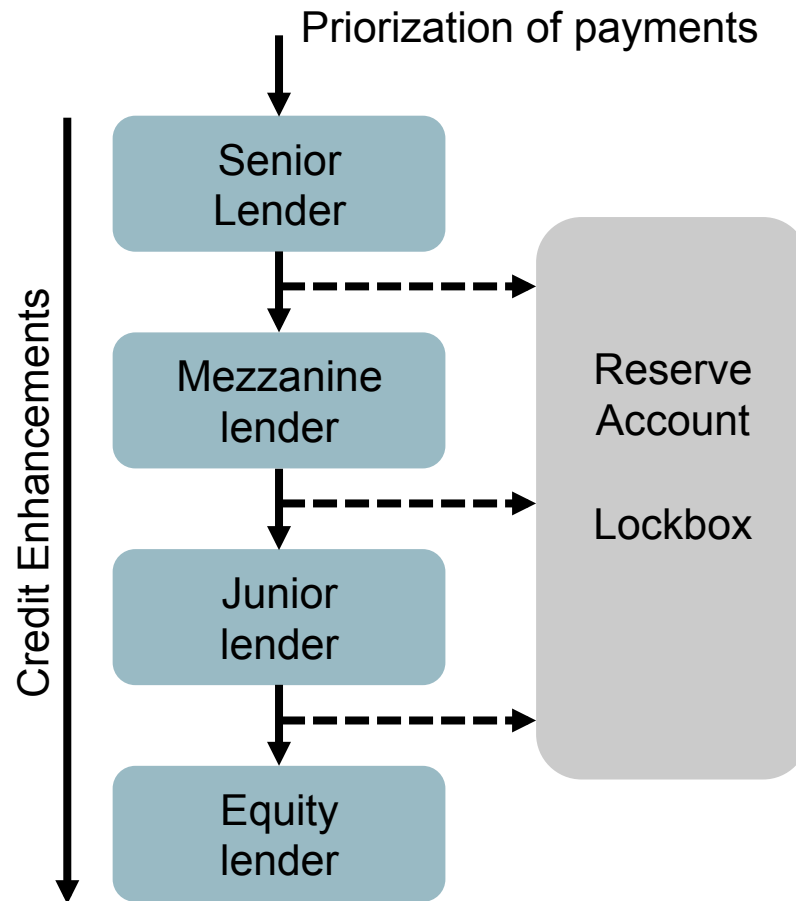
But: **transaction-based valuation**

- Scoring methods are not very useful for a portfolio as the one of FMS-WM
- Instead: **causal** valuation (PD = "hitting probability", **(stressed) loss scenarios**) is necessary, e.g., **cash flow valuation incorporating stochastic components**
- FMS-WM needs to evaluate all significantly large exposures in such ways

**Macro & market views and segment-specific** (e.g., real estate) know-how are crucial



## Examples: structures & strategies



### **Credit enhancement** mechanisms

- subordination
- cash traps
- redirection of interest & principal
- trigger events
- structural control

### **Strategy** after transfer to FMS-WM

- analyze position & inherent risks
- understand status quo (e.g., syndicate, breaches, triggers, cash accounts, etc.)
- analyze connected swaps (e.g., interest rate or currency swaps)
- evaluate sale and restructuring options
- elaborate strategies going forward
- bring strategies into committee(s) for approval process
- start with implementation of approved strategy & measures

Comparable situations occur across various asset classes; patterns occur repeatedly



## Agenda

- The influence of the 2007/2008 financial crisis
- FMS Wertmanagement: a public wind-down agency
- Active CPM at FMS Wertmanagement
- **Chances and challenges, outlook and perspectives**



## Chances for FMS Wertmanagement

### Refinancing

- FMS Wertmanagement can turn negative carry into **positive carry**

### Long breath, no need for firesales

- FMS Wertmanagement has time to wait for pull-to-par or **pull-to-value**

### Concentrated expert Know-how

- FMS Wertmanagement was able to attract **experienced** portfolio managers, credit specialists, accountants, lawyers, IT professionals, traders in treasury, etc.

### Lean organization

- FMS Wertmanagement operates the firm with a **moderate number of people**
- Insourcing a function instead of outsourcing is only done if
  - FMS Wertmanagement is obliged to insource (e.g., MARisk reasons)
  - FMS Wertmanagement is convinced to perform better than external parties

### Cost efficiency

- FMS Wertmanagement is strictly **cost conscious**
- FMS Wertmanagement follows the strict cost rules of public institutions



## Challenges in winding-down a portfolio like the FMS-WM portfolio

**Long term assets**, e.g., public sector or infrastructure finance

- Reliable forecasts over a period of 20-30 years are more or less impossible
- Wind-down plan of FMS-WM currently foresees an initial time period of 10 years

### **Complexity**

- Some of the structured credit risks in the FMS-WM portfolio are highly complex
- For instance, tranching assets referencing tranching portfolios of tranching CMBS, etc.
- Statistical modeling of such transactions is possible but time consuming and intense

### **Illiquidity**

- Various positions are highly illiquid, for instance, in the infrastructure finance area
- FMS Wertmanagement can then only follow a strategy to try to improve its position at each restructuring step or prolongation round; sale at a large haircut is no option

***It will take time, patience & long term strategic thinking to finally unwind the assets***

***However, the chosen form of wind-down agency can leverage its advantages for the benefit of the owner and, therefore, for the benefit of German tax payers***



## Impressum

<b>Name</b>	FMS Wertmanagement AöR
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<b>Email</b>	info@fms-wm.de
<b>Internet</b>	<b><a href="http://www.fms-wm.de">www.fms-wm.de</a></b>
<b>Commercial register</b>	Munich HRA 96076
<b>Sales Tax ID number</b>	DE273251754
<b>Representatives</b>	Dr. Christian Bluhm (Member of the Executive Board), Chief Risk Officer Ernst-Albrecht Brockhaus (Member of the Executive Board), Treasury/Market Frank Hellwig (General Manager), Chief Operating Officer
<b>Chairman of the Supervisory Board</b>	Dr. Karl Kauermann