

Valuation, Risk Measurement and Marketing Requirements of the European AIFMD: Is Your Firm Prepared?

Presented by:
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The Valuation of Illiquid Assets

Valuation Standards and Methods Consistent
with the AIFMD

Presented by:
Dr. Stanley J. Feldman



Dr. Stanley J Feldman

Chairman and Co-founder



Stan is the chief valuation officer for the company, and has overall responsibility for the company's signed valuation reports and for the company's valuation analysis systems. He directly manages the company's valuations for financial reporting and fair value projects.

Stan has consulting and academic experience in the valuation of privately held and publicly traded firms, along with extensive real world experience. He is an expert in the valuation of complex financial securities, including thinly traded equity and fixed income instruments, and public and privately held businesses. He helped to draft FAS 157(now Topic 820), the fair value standard, as a member of the Financial Accounting Standards Board's (FASB) Valuation Resources Group, an external advisory committee on valuation issues.

Stan received a B.A. in Economics from the City University of New York, Hunter College, a M.A. in Economics from the New School for Social Research, and a Ph.D. in Economics from New York University.

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Today's Webinar Will Answer the Following Questions

1. What is the AIFMD valuation mandate and its resource implications?
2. Is fair value the appropriate valuation standard under AIFMD?
3. What are the appropriate valuation methods to use when valuing complicated illiquid assets?
4. What are the implied AIFMD guidelines to fair valuing illiquid securities?
 1. Junior RMBS tranche
 2. Preferred Stock
 3. Corporate loan (Appendix)
5. What are the Take-Aways for Attendees?

The AIFMD Asset Valuation Mandate

The Directive states:

“AIFMs shall ensure that the valuation function is either performed by:

- an external valuer, being a legal or natural person **independent** from the AIF, the AIFM and any other persons with close links to the AIF or the AIFM; or
- (b) the AIFM itself, provided that the valuation task is functionally **independent** from the portfolio management and the remuneration policy and other measures ensure that conflicts of interest are mitigated and that undue influence upon the employees is prevented.”

Independence means that there is a tangible separation between investment decision making and asset valuation

- Different people, potentially separate reporting structures

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The AIFMD Asset Valuation Mandate Continued

The AIFMD has multiple goals. Among these are

- Transparency and
- Assessment of systemic risk at any point in time.

Transparency is directly related to valuation of assets and particularly financial securities that are highly illiquid.

Systemic risk measurement is related to the aggregation of risk profiles of AIFs which as Thomas will show is related to valuation measurements.

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AIFMD Valuation Standard: Fair Value

Fair value is the only valuation standard that is consistent with the requirements of AIFMD.

Consistent with financial reporting standard IFRS 13:

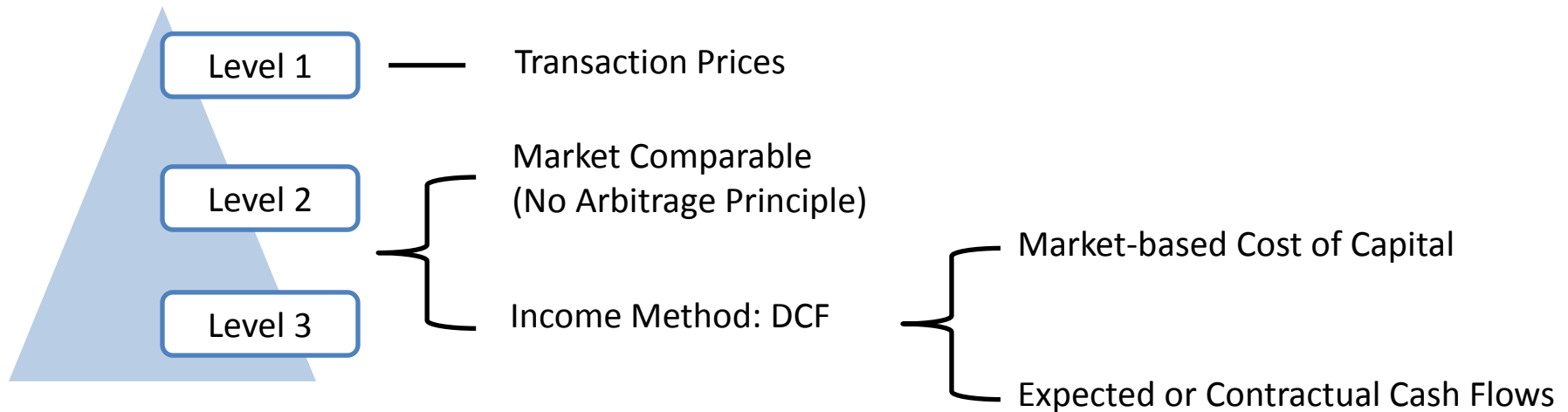
- Exchange/Exit Price
- Transaction takes place in **Primary Market** or under certain conditions most advantageous market
- Transaction takes place under **Normal** market conditions
- A hypothetical transaction price of an illiquid asset based on verifiable market inputs used by an informed market participant.

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Fair Value Measurements: U.S. GAAP vs. IFRS

	U.S. GAAP	IFRS
Relevant guidance	ASC 820	IFRS 13
Recognition of day one gains and losses (which arise when the transaction price does not equal fair value)	The recognition of day one gains and losses is required, even when the inputs to a fair value measurement are not observable, unless other guidance in the Codification prohibits the recognition of such a gain or loss.	In certain situations, the recognition of day one gains and losses is prohibited when the inputs to a fair value measurement are not observable. For example, in some cases, the difference between the fair value and transaction price of a financial instrument at the acquisition date is deferred (instead of recognized as a day one gain or loss) when the inputs used to measure the fair value of the financial instrument are not observable.
Accounting for alternative investments	A practical expedient permits the measurement of certain alternative investments at net asset value.	A practical expedient for measuring alternative investments does not exist.
Disclosures	A quantitative sensitivity analysis is not required.	A quantitative sensitivity analysis is required for financial instruments measured at fair value and categorized in level 3 of the fair value hierarchy.

Fair Value Hierarchy and Valuation Methods



Both DCF and Market Comparables provide “shadow Level 1 values”, transaction prices that would emerge if the target asset were selling in a liquid market.

Fair value of illiquid securities must be adjusted for lack of liquidity, the discount that should be applied since the security cannot be sold “immediately at its liquid fair value.

Method: **Put Option:**

- Strike Price: liquid fair value;
- Time: normal time it takes to market the security in question;
- Volatility: Implied volatility of traded options on comparable underlying

Fair Value of Various Asset Classes

	Valuation Methods/Factors	Problem with Data Feeds?
Preferred Stock	<ul style="list-style-type: none">Contingent Claims ModelLiquidity Adjustment	<ul style="list-style-type: none">Indicative Pricing: No basis/source documentationBid-Ask Posting/ No Transaction
Common Stock	<ul style="list-style-type: none">Income Method (DCF) / Comparable CompaniesLiquidity Adjustment	
Bonds	<ul style="list-style-type: none">Current Credit RatingSpread Adjusted by SizeLiquidity Adjustment	
Loans		
CDO	<ul style="list-style-type: none">Current Credit RatingWaterfall	
CLO		
CDS	<ul style="list-style-type: none">Default ProbabilityLiquidity Adjustment	

Two Examples of Applying Fair Value Principles to Pricing Illiquid Securities

Example 1: RMBS Pricing

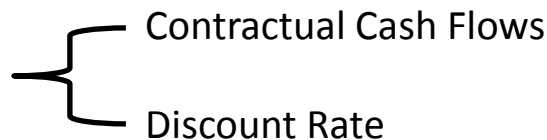
	Issue Date (July 2010)	Measurement Date (Dec 2012)
Rating	A	A
Tranche	Junior	Junior
Credit Spread	500	Unknown
Collateral	Non-conforming Residential Mortgage Loans in Europe	
Market Activity	Few Transactions between Two Dates / Trading Volume Low	



Market Approach



Income Approach

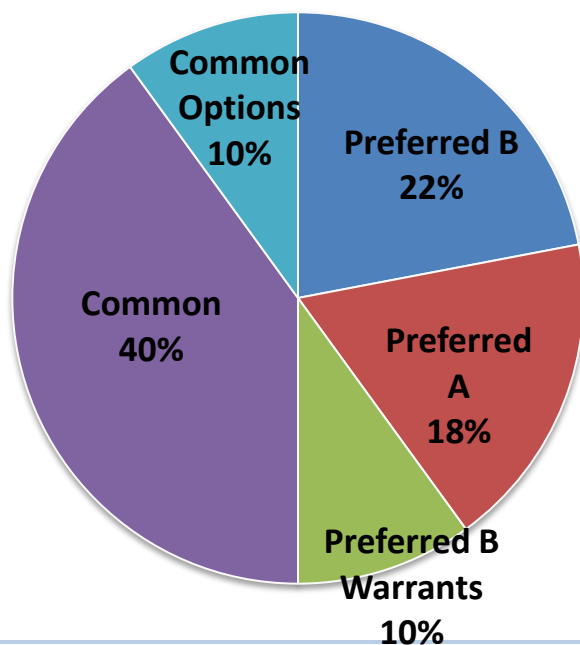


1. Ratio at Issue Date (RID): _____ = 0.75
2. Credit Spread at Measurement Date: A Rated Jr. Tranche = $0.75 \times \text{A Rated Finance Credit Spread}$
3. Discount Rate at Measurement Date = On the Run LIBOR yield Curve at Measurement Date + RID $\times \text{A Rated Finance Credit Spread Curve}$
4. Liquid Value at Measurement Date = _____
5. Fair Value of RMBS = Value from 4 – Liquidity Put Option

Example 2: Fair Value Pricing of Capital Structure

	Value	Method
Enterprise Value	€60,000,000	DCF / Comps Multiple / Back-solve
Debt Value	€8,000,000	Income Approach
Liquidity Adjustment	€2,000,000	Put Option
Equity Value Liquidity Adjusted	€50,000,000	Income Approach / Back-solve

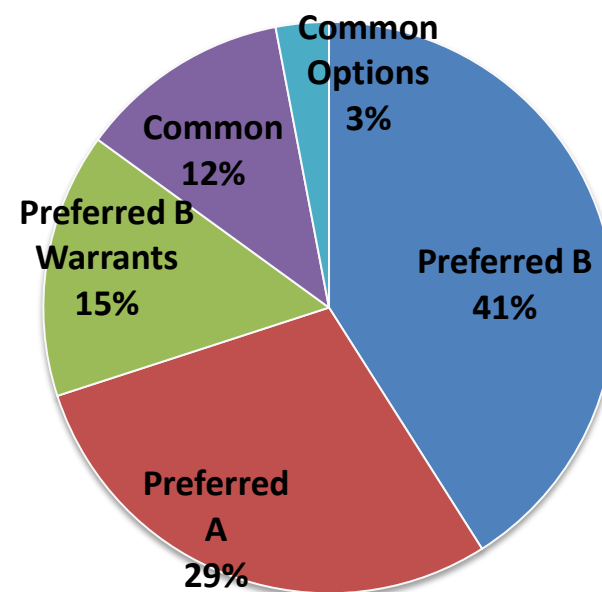
Ownership %



Contingent Claims Model Framework



Value %



What are the Takeaways for Attendees?

1. The central feature of AIFMD is that it imposes functional separation, that is independence, between investment management and post investment valuation of fund assets. This implies that prices assigned to assets must be vetted by an objective third party and the standard used must be fully transparent.
2. The only standard that meets the objectives described in 1 and is the accepted financial reporting standard is IFRS 13.- the fair value standard.
3. The underlying assets of AIFs are often highly illiquid, Level 2 and Level 3. For these assets, the fair value standard requires the use of market inputs along with accepted model structures to arrive at a conclusion of value. IFRS is fully consistent with the AIFM Directive in that it requires sensitivity testing as a critical input to establishing fair value of illiquid assets.
4. Given the Directive's requirements, AIFMs must formalize valuation frameworks and be prepared to use these frameworks to establish fair value and use them in sensitivity testing and as a critical component of risk management analytics.

About Axiom Valuation Solutions

Axiom Valuation Solutions is a nationally recognized financial security and business valuation firm. We have conducted valuation assignments for clients throughout the U.S., Europe and Asia. We regularly conduct fair value assignments for financial institutions in terms of fair valuing portfolio assets and liabilities as well as acting as an advisor and assessing whether internal transfers between funds meet the fair value standard. Our Co-founder and Chairman, Dr. Stanley Jay Feldman, was a member FASB's Valuation Resource Group, an advisory group to FASB on fair value issues.

For more information, please visit

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Risk Measurement: Implementing Robust Methods for Back-testing, Stress Testing and Scenario Analysis

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Thomas is a Senior Advisor to Axiom Valuation Solutions Europe (AVSE) and the Vice Chairman of the European Bond Commission.

Thomas specializes in developing innovative products and services for the financial industry: Products being introduced are among others Tripartite Repo Services, Agency Fund Trading, Performance Measurement and Attribution, Market Risk Reporting, Liabilities Modeling, Collateral Management, Exposure Monitoring.

Thomas is on gardening leave from State Street Bank where he specialized in product development for risk management, collateral management, fixed income analytics, and performance measurement. Previous to State Street, he was a Director at Deutsche Bank where he focused on product development in the performance measurement and attribution area, as well as market risk reporting. He also worked as a Senior Manager at Clearstream Banking and as a Financial Market Specialist for the US Embassy in Germany.

Thomas received a Dr. phil in Political Science, Economics, and Sociology from Rheinische Friedrich-Wilhelms-Universität Bonn.

Today's Webinar Will Answer the Following Questions

1. What is required for risk management in accordance with AIFMD?
2. What are the challenges for portfolios containing illiquid assets?
3. What are the possible choices?
4. How does Axiom Valuation Solutions perform risk measurement?
5. Is there an example for the outcomes?
6. What are the basic take aways?

What are the tasks the AIFMD assigns to “risk management”?

1. AIFMs shall functionally and hierarchically **separate** the functions of risk management from the operating units, including from the functions of portfolio management.
2. AIFMs shall **implement adequate risk management systems** in order to identify, measure, manage and monitor appropriately all risks relevant to each AIF investment strategy and to which each AIF is or may be exposed.
3. AIFMs shall **set a maximum level of leverage** which they may employ on behalf of each AIF they manage, as well as the extent of the right to reuse collateral or guarantees that could be granted under the leveraging arrangement.

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Challenges vs. Solutions

Challenges:

Identification of risks and their measurement for not frequently traded securities (i.e. private equity; loans).

- How to conduct an ongoing monitoring for those risks?
- How to formulate stress-tests for those risks?

Indirect Solutions:

VaR systems can be tweaked to deal with not frequently traded securities through factorization. The covariance matrix of the factors is measured and translated into the realm of non-traded securities. This is simply a transfer of market risks into investment classes which are essentially and intentionally characterized by private – non public - investments.

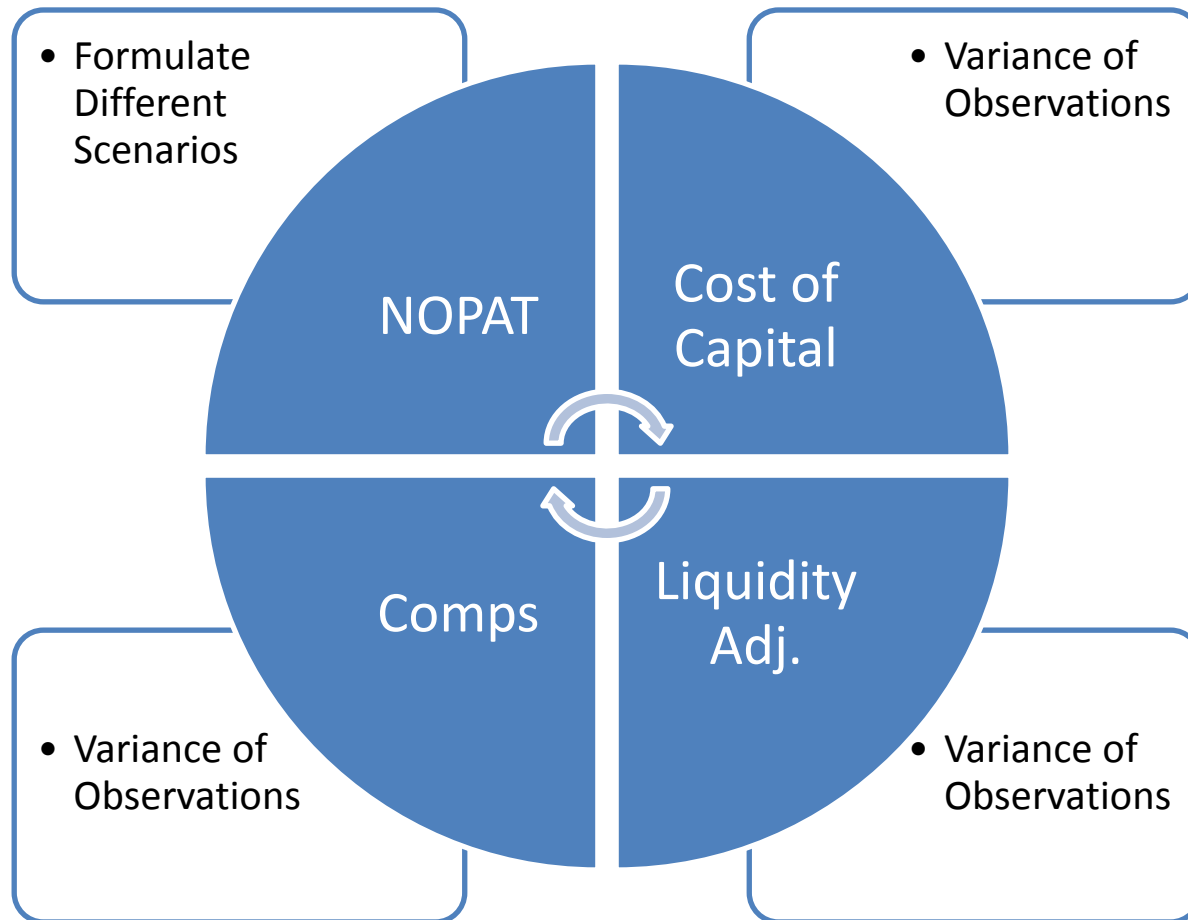
Direct Solutions:

Dealing with the uncertainties embedded in the valuation assumptions of non-publically traded securities.



Risk Measurement Example

Risk Measurement for Enterprise Value Related Parameters



What are the Results? – Schematic View

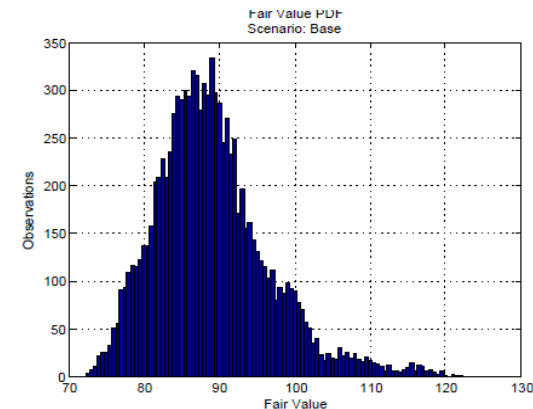
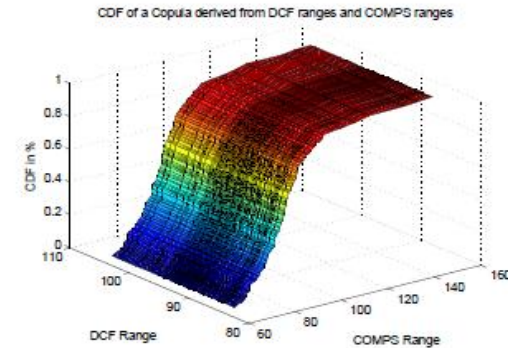
The Starting Point: Probability distributions of the parameters that are used in the Fair value calculation process: DCF, Comps and Liquidity.

The Technique: Measure their correlations and construct a Copula for the Monte Carlo simulation.

The Outcome: A probability density distribution of the Fair Value estimate.

Usage: This allows us to estimate the Value-at-Risk at any desired confidence level – AIFMD demands the 99% confidence level – and if demanded – delivers other distribution parameters like Tail Loss. We can also compute all higher moments of the distribution like skewness or kurtosis.

Stress Testing: This exercise is repeated for different – stress tested - expectations regarding the net operating profit after taxes (NOPAT). The same comprehensive set of measures can be delivered for each scenario within our stress testing.



Risk & Scenarios in CU mil	FV	VaR-99%	1% Tail Loss
Base	84.05	73.27	71.53
Base - 10	79.42	68.69	67.58
Base - 25	72.47	61.42	60.34

Summary

1. Risk is the second dimension in the valuation process. Or simply: Without valuation there is no reliable risk measurement.
2. Risk measurement looks at the observable differences in the valuation input parameters.
3. Stressing those input parameters with the help of scenarios and by Monte Carlo analysis delivers a reliable framework.
4. This framework is developed to meet the strong risk measurement guidelines set by the AIFMD.

About Axiom Valuation Solutions Europe GmbH

Axiom Valuation Solutions Europe (AVSE) provides a comprehensive range of expert valuation services for private businesses, illiquid securities, fixed income portfolios, intangible and tangible assets, and other hard-to-value assets. We value thinly traded public companies and divisions of public companies for a variety of purposes.

We offer a unique alternative investment return authentication service (AIRAS) for institutional investors in hedge funds and private equity funds. In the increasingly complex world of valuation, we provide ANSWERS YOU CAN TRUST, and UNDERSTANDING BEYOND THE NUMBERS.

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Marketing Funds: Navigating the European Directive's Regulatory Landscape

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Angelo Lercara, LL.M. EuR advises on all aspects of financial services law. He has significant experience in UCITS and non-UCITS-related counselling and advises his clients regarding offerings, distribution and listings in Germany. He acted as advisor in relation to the first listings of ETCs and on several listings of ETFs on the Frankfurt stock exchange. In addition, he advises hedge fund managers with regard to their investments in German listed companies as well as with regard to the German regulatory framework of hedge fund offerings.

He advised major US managers of hedge and real estate funds with regard to the structuring of funds in view of their eligibility for German insurance companies and other institutional investors. Mr. Lercara also has a broad client range of German banks and German branches of foreign banks that he advises with regard to their full scope of business.



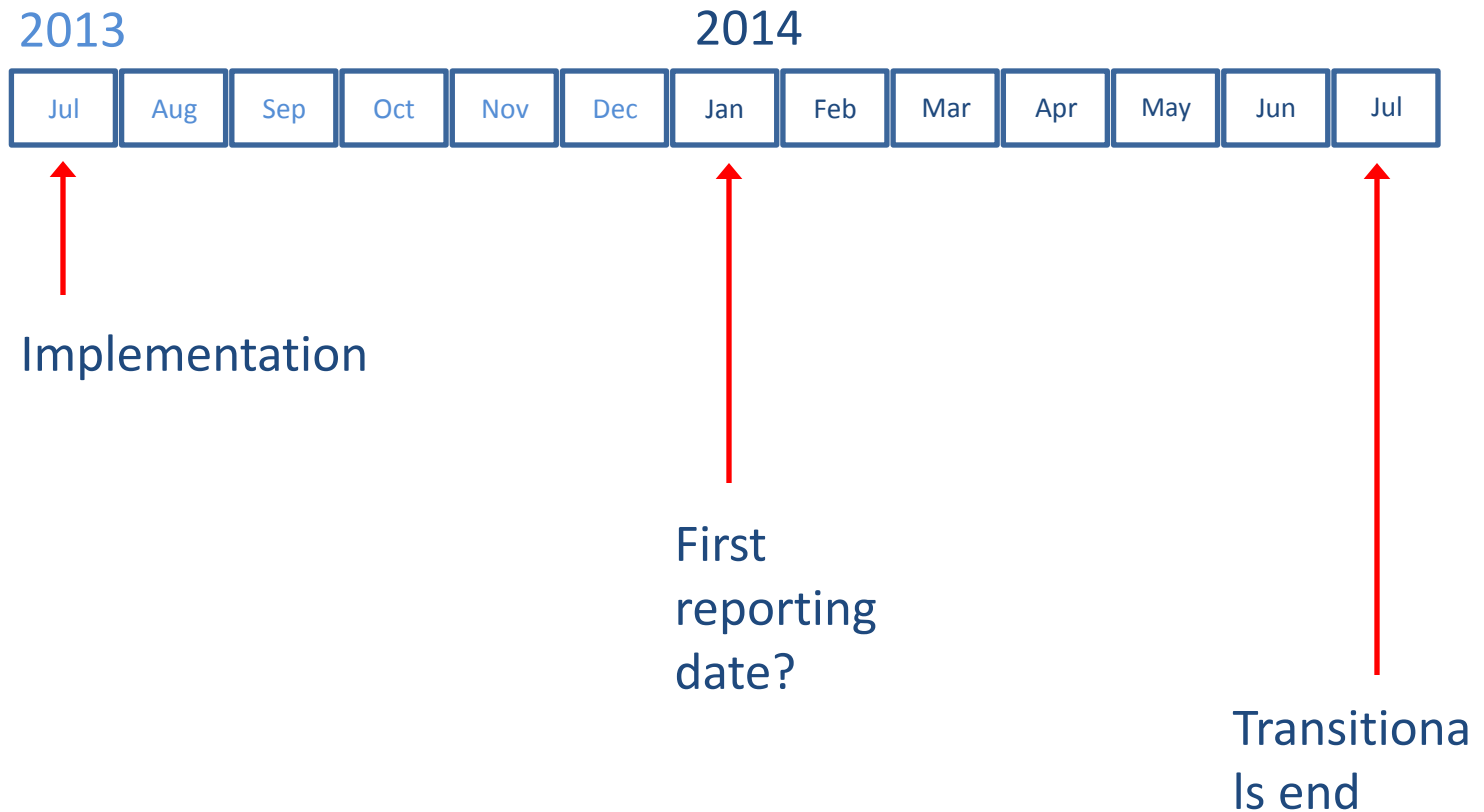
What are the effects of the AIFMD?

Regulation of any asset manager that

- markets to European investors
- manages a European fund
- delegates to a European/US sub-adviser



AIFMD: Transitional Period





AIFMD: Routes to European Capital

- Transitional relief
- Reverse solicitation
- Private placement
- Outside scope marketing
- EEA passport

Subject to local rules.



AIFMD Marketing: Focus on Germany



New Definition of Marketing

- The **direct** or **indirect** placement of units or shares in an investment fund and the marketing of investment funds.
- The former requirement of “public” marketing according to the German Investment Act is deleted.
- Only limited exemptions exist (e.g., the mere citing or publication of the AIF’s net asset value or quoted price; the compliance with statutory disclosure requirements).



New Definition of Marketing

- **No private placement regime** under the new law. **Registration** required for any marketing.
- **Reverse solicitation** still permissible.



Different Classes of Investors

- Different definitions of investors from the MiFID (Annex II) with minor amendments.
- Professional investors:
 - AIFMD refers to MiFID, Annex II (e.g., credit institutions, securities firms, insurance companies, investment funds).
- Retail investors:
 - All other investors that do not qualify as professional or semi-professional investors.



Different Classes of Investors

- Semi-professional investors:
 - Investors who (i) invest at least EUR 200,000; (ii) confirm their awareness of the risks in written form; and (iii) who are comparable to professional investors (skills, expertise, knowledge) (classification as semi-professional investor has to be certified to the investor by the AIFM in writing), or
 - investors who invest at least EUR 10,000,000.



Transition Rules

- Transition period from 22 July 2013 to 21 July 2014 for non-registered funds.
- General rule: **any Fund** (UCITS/AIF) that is already lawfully privately placed in Germany on 21 July 2013 can still “operate” within a private placement until 21 July 2014 at the latest.
- If “marketing” is intended after 21 July 2014, registration is required or no marketing activities must be performed (*i.e.*, existing German Investors remain in the fund but no new investors are solicited).



About Dechert LLP

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We are relentless in serving our clients – delivering the best of the Firm to them with entrepreneurial energy and seamless collaboration in a way that is distinctively Dechert.

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Webinar Key Points

Valuation

- AIFMD imposes Separation, that is **Independence**, between Investment Manager and post-investment valuation of assets – must be vetted by an independent/third party
- IFRS 13 (“**The Fair Value Standard**”) is the only standard that meets the objectives of AIFMD

Risk

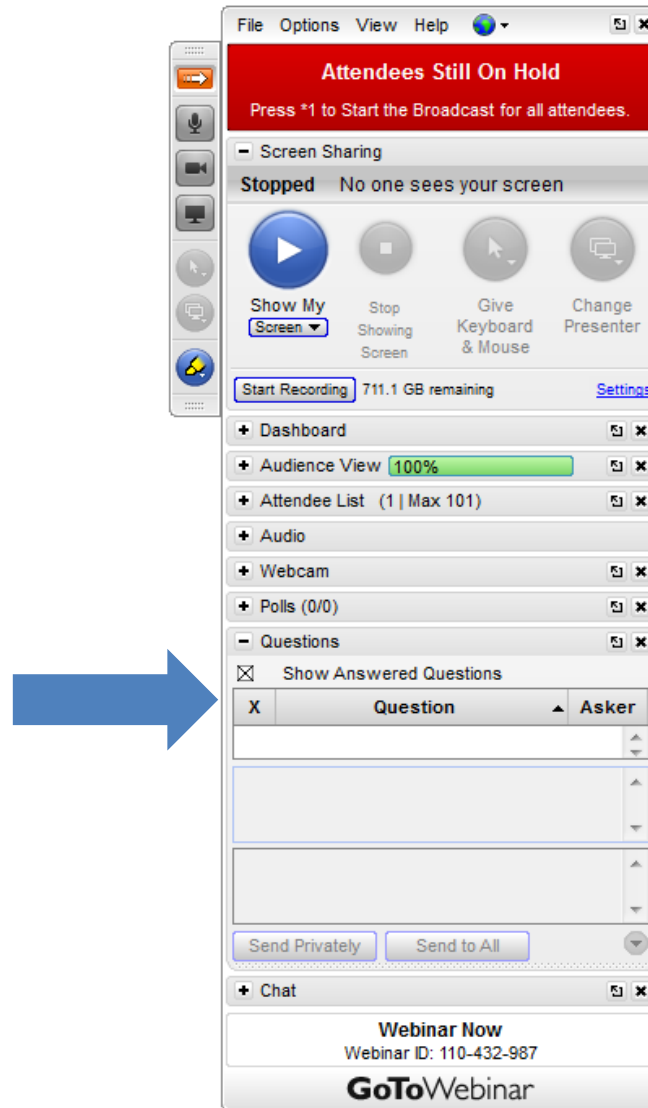
- **Risk is the second dimension** in the valuation process
- **Stressing input parameters** with the help of scenarios and by Monte Carlo analysis delivers a reliable framework which meets AIFMD guidelines

Marketing

- AIFMD **effects any asset manager** that markets to European Investors, manages a European Fund, or delegates to a European/US Sub-Advisor
- No Private Placement regime under the new law. **Registration is required** for any marketing and Reverse Solicitation is still possible
- **Transition period** of one year, starting 22 July 2013

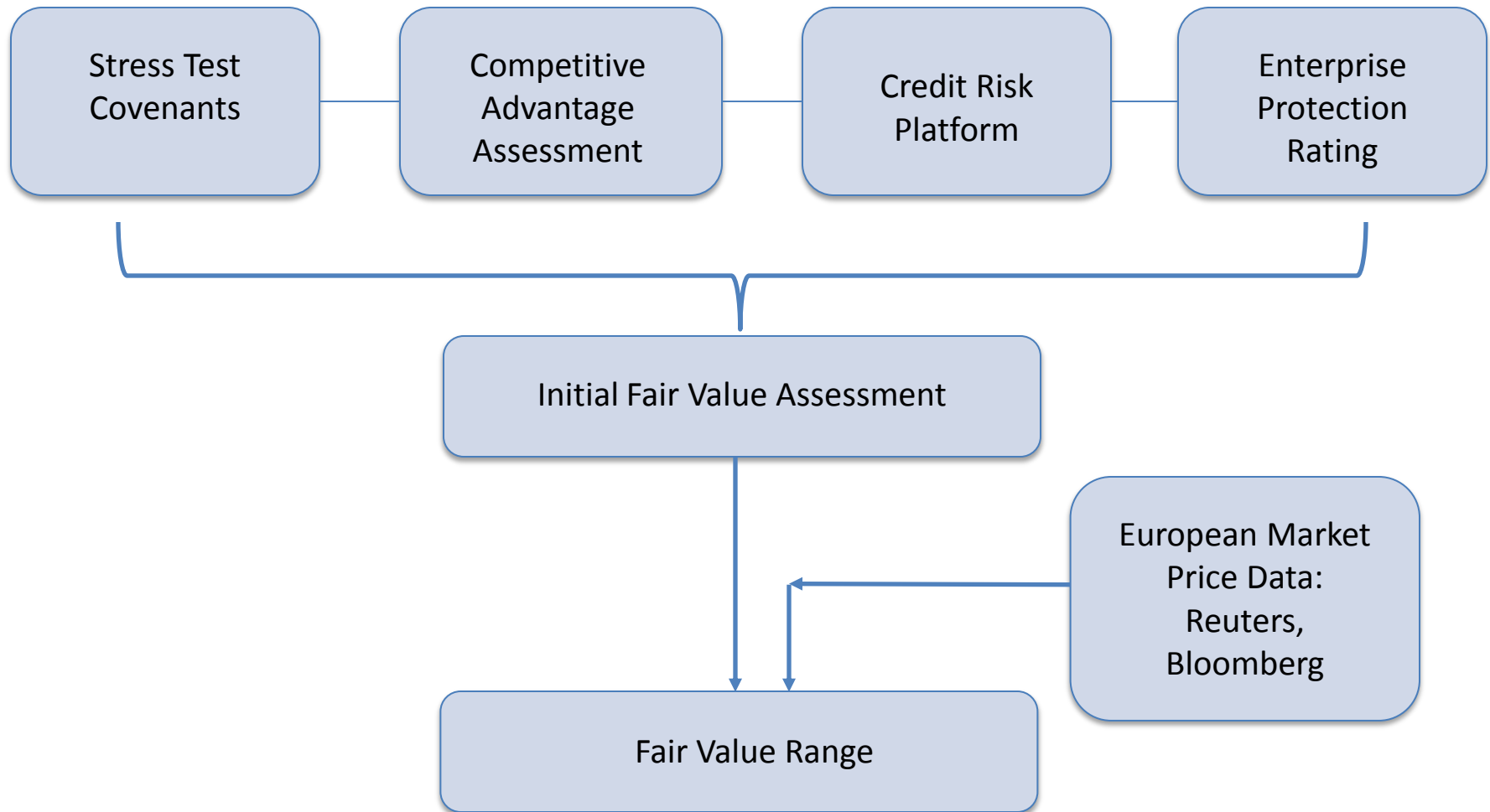
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Questions

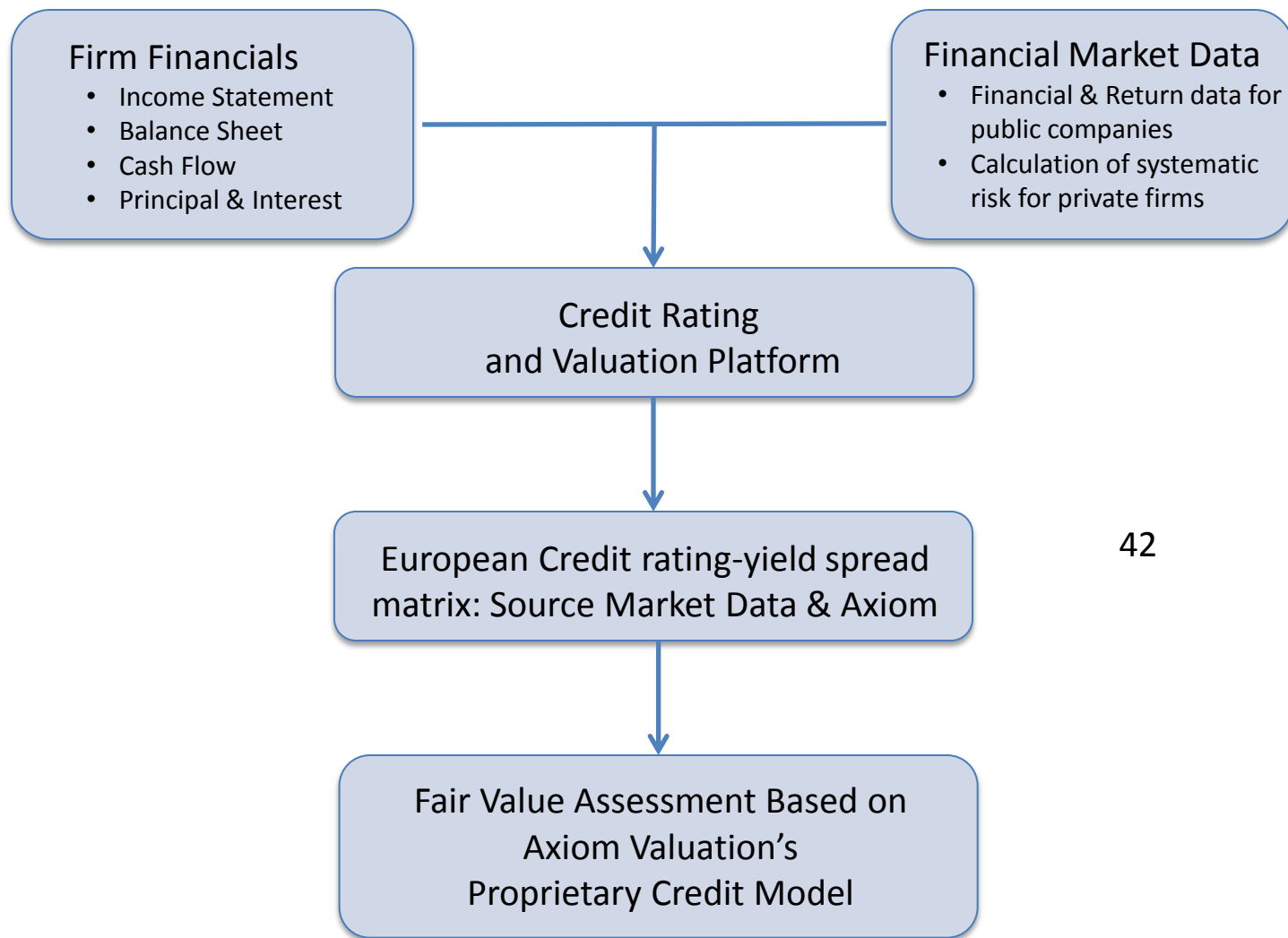


Appendix: Loan Pricing

Loan Pricing Model



Loan Pricing Credit Platform



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Loan Pricing

Basic Info

	Value
Financing Type	First Lien Term Loan
Principal as of Measurement Date	€5,000,000
Years to Maturity	7
Interest Rate	LIBOR + 575 bps

Axiom Risk Assessment and Credit Rating

	Score	Interpretation
Covenant Stress Analysis	75%	Good
Enterprise Value Debt Coverage	1.73	Good
Competitive Strength Rating	3	Adequate
Debt Credit Assessment	B	
Overall Credit Rating Equivalent	B+	

Loan Pricing Continued

