The KPMG iRADAR
Valuation Assurance Service
Global Contacts

KPMG

cutting through complexity

Valuation Assurance for
Alternative Investments

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THE **KPMG**
iRADAR
Global Intelligence Geared for Your Future

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The **KPMG iRADAR** is a cutting-edge combination of specialists' know-how and software intelligence.

The **KPMG iRADAR** provides service to more than 530 member firm clients in 20 different countries.

The **KPMG iRADAR** integrates sophisticated software with the expertise of a specialized team of financial analysts to offer a variety of services to banks, investment funds, pension funds, hedge funds and portfolios of insurance entities. Functionalities range from analyzing the profile and structure of investment portfolios to identifying potential risk areas with each entity's portfolios.

The **KPMG iRADAR** team has developed a unique Valuation Assurance Package based on our long-standing experience and focused on the needs of the alternative investment industry.

This assurance service is provided globally from the Cayman Islands, Germany and India.

Independent Valuation Assurance

In light of current market turbulence, stakeholders are demanding more transparency. This development is creating new challenges for the alternative investment industry. The challenges KPMG professionals are observing are shown in the picture below.

Enhance your Competitiveness

The **KPMG iRADAR** Service offers a Valuation Assurance Package uniquely designed for the alternative investment industry. This package addresses external stakeholder demands for transparency and supports the quality and consistency of asset valuations for all related processes and across all administrators. The package can be tailored to the specific needs of the alternative investment industry. The independent valuation assurance report increases credibility for current and prospective investors and can be utilized as a marketing instrument. The **KPMG iRADAR** in depth valuation analytics differentiate the investment manager's product in a crowded marketplace.

External Demand for Transparency

External Demand Triangle

Internal Awareness for Quality and Consistency

Internal Requirement Circle

Investors and Advisors

- Investors are demanding additional assurance on valuations and specific disclosure topics.
- Advisors value transparency on valuation in their due diligence process.

Consistency across Funds

- Different administrators may derive different valuations for identical assets.
- Asset managers seek to derive consistent valuations and disclosures among their funds.
- The **KPMG iRADAR** applies independent valuation approaches consistently across funds.

Regulators

- AIFM Directive Level 2 demands additional checks and controls on valuations (e.g. comparison with third party valuations).
- Dodd-Frank Act requires defined procedures and policies concerning securities' valuation.
- IOSCO calls for a regular third party review and disclosure to investors of valuations.

Independent Directors

- Directors are seeking external and independent views on valuations.
- Directors' awareness has risen significantly in the light of recent litigation.

Industry Benchmarking

- Peer group benchmarking is seen to be highly valuable for hard to price investments.
- Changing market standards lead to new challenges for valuations and related disclosures.
- The **KPMG iRADAR** offers independent valuation assurance and unique peer group benchmarking.

Administrator

- Many fund companies invest significant resources in shadowing asset valuation.
- Reconciling valuation differences is often difficult and time consuming.
- The **KPMG iRADAR** can mitigate the risk related to outsourcing valuations.

The KPMG iRADAR
Valuation Assurance Services

What can you expect?

- Independent assurance
- Transparent approach
- Easy to read reporting package
- Tangible results

- Market differentiator and marketing instrument
- Industry best practice benchmarking of administrators' processes
- One consistent valuation approach across funds
- Reports detailing discretionary level of assurance

What do you get?

- Full coverage of a fund's financial instruments
- Advanced valuation techniques
- Compliance with ISAE 3000 standards
- Application of security, quality and independence standards for audit firms
- On-site workshop

- Assurance Report (see pp. 8-11)
  - Statement
  - Analytics
- Detailed analytics for internal use
  - Traffic Light Report – pointing out strengths and weaknesses
  - Executive Summary – reflecting results on the level of the fund
  - Instrument Details – listing results and decision triggers for each instrument

How does it work?

Hedge Fund Data Upload

- No specific format required
- Secure interface
- Generally accepted data integrity

Data Mapping

- Mapping to the KPMG iRADAR's specific tables
- Quality check done by the KPMG iRADAR

Independent Valuation

- 10 years in production
- 30+ specialists involved
- 530 clients in 20 countries
- 40,000 portfolios processed annually
- 250,000 securities analyzed in database
- The KPMG iRADAR operates out of the Cayman Islands, Germany and India

Assurance Package

- Tailored quarterly assurance reporting
- Detailed results and analytics
- Regular on-site workshops
- Knowledge transfer
- Process benchmarking
- Industry best practice recommendations

Local Contact

- Local client support
- Communication of results

Stakeholders

Advisor
Investor
Director
Manager
Administrator
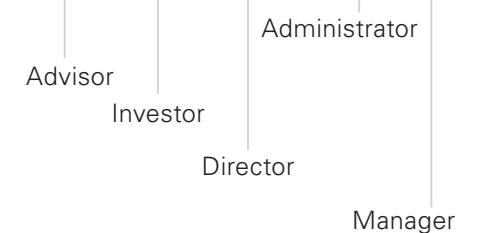
Example Assurance Report

Example Assurance Statement

KPMG

To the Executive Committee   Our ref   AFS/CM/vb
HFund Ltd.
Sample Street 1
12345 Sample Town

1 June 2012

Assurance Statement

Dear Sir or Madam:

we have been engaged by the executive committee of HFund Ltd. (hereafter "HFund") to per-
form an independent assurance assessment of the reliability of the fair value measurement ap-
plied by HFund in order to determine the value of financial instruments, in particular, as well as
the portfolio HFund 1 in its entirety, as of 31 May 2012.

Scope of Engagement

The scope of our assurance engagement extends only to the value of financial instruments com-
prising the portfolio HFund 1 as determined by HFund, subject to the limitations we have de-
fined in the document "The KPMG iRADAR Validation Approach". This document is attached
to this letter as Appendix B.

Determination of suitable criteria

As a basis for the assurance engagement, we have used suitable criteria specifically developed
for Valuation Assurance Services provided to hedge funds. These criteria are described in detail
in the document "The KPMG iRADAR Validation Approach". This document is attached to
this letter as Appendix B. We consider these criteria to be relevant and appropriate to review the
value of financial instruments in particular as well as the portfolio HFund 1 in its entirety.

The management's responsibility

HFund's management is responsible for the accounting and the valuation of financial instru-
ments comprising the portfolio HFund 1. It is also responsible for selecting the necessary

Conclusion

On the basis of our procedures aimed at obtaining reasonable assurance, we conclude that in our
opinion the fair value measurement applied by HFund in order to determine the value of finan-
cial instruments, in particular, as well as the portfolio HFund 1 in its entirety, as of 31 May 2012
is reliable.

On the basis of our procedures aimed at obtaining limited assurance, nothing has come to our
attention that causes us to believe that the fair value measurement applied by HFund in order to
determine the value of financial instruments, in particular, as well as the portfolio HFund 1 in its
entirety, as of 31 May 2012 does not comply with the above mentioned suitable criteria.

Yours sincerely

KPMG

ASSURANCE
CONFIRMED
ADDED VALUE FROM KPMG

Enclosure:
Assurance Analytics
The KPMG iRADAR Validation Approach (description)
General Engagement Terms

Example Assurance Analytics

Example 1
Price Analysis for Mixed Asset Classes

HFund has provided a portfolio for assurance purposes.
This document outlines the results of our valuation of this
portfolio.

Overall the KPMG iRADAR was able to process 1,766 out of
1,836 investments (96%). A further 59 investments could
be analyzed with limited additional data. The appendix to
this document provides an overview of the data utilized for
this purpose.

Overall we identified a market value variance of USD 203k
which represents 0.09% of the total market value.
USD 178k of this variance can be directly reconciled within
usual pricing uncertainties by performing further analysis.
The remaining USD 25k represents 0.01% of the overall
portfolio value and lies within the expected range, on a port-
folio basis, for a portfolio of this complexity, and would be
considered immaterial within the context of an audit.

Example 2
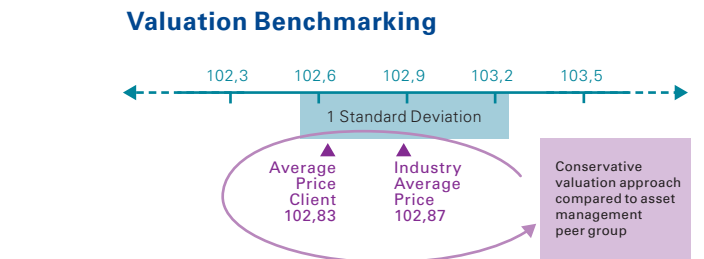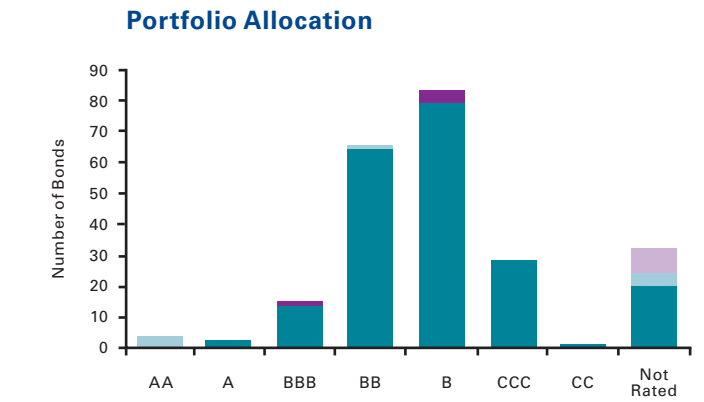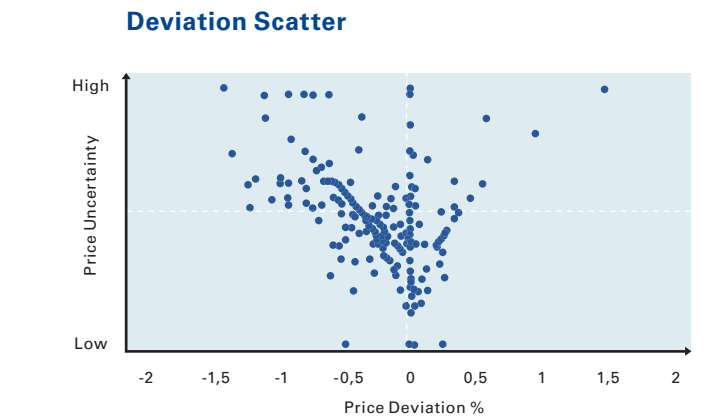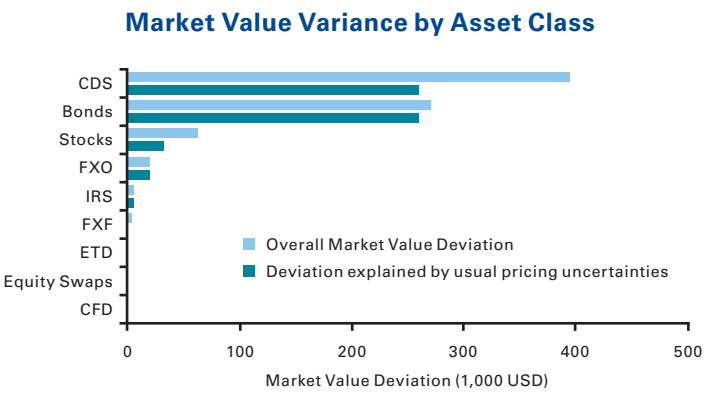### Price Analysis for Bonds, Loans and
Convertibles

The chart on the right illustrates the impact of high pricing
uncertainty on the valuation of this portfolio and the observ-
able pattern. Each of the points in the scatter represents
one debt instrument.

The analysis shows that the number of observations with a
negative price deviation outweighs the number of observa-
tions with positive price deviation. A negative price devia-
tion indicates that the prices submitted are lower than the
reference prices derived by the KPMG iRADAR's independ-
ent pricing process.

Higher pricing deviations occur for debt instruments with
higher pricing uncertainty. Furthermore, where there are
higher pricing uncertainties, the debt instruments tend to
be valued conservatively.

Peer Group Analysis

- Average peer group prices were determined for 130
  securities

- On average, the KPMG iRADAR compares each security
  with 5.5 prices within its database

- Average standard deviation: 0.33%

- Volume weighted average price deviation: -0.24

Market Value Variance by Asset Class

Legend:
- Overall Market Value Deviation
- Deviation explained by usual pricing uncertainties

Market Value Deviation (1,000 USD)

Categories: CDS, Bonds, Stocks, FXO, IRS, FXF, ETD, Equity Swaps, CFD

Deviation Scatter

Price Uncertainty (Low–High) vs Price Deviation % (-2 to 2)

Portfolio Allocation

Number of Bonds vs AA, A, BBB, BB, B, CCC, CC, Not Rated

Valuation Benchmarking

102,3   102,6   102,9   103,2   103,5

1 Standard Deviation

Average Price Client 102,83
Industry Average Price 102,87
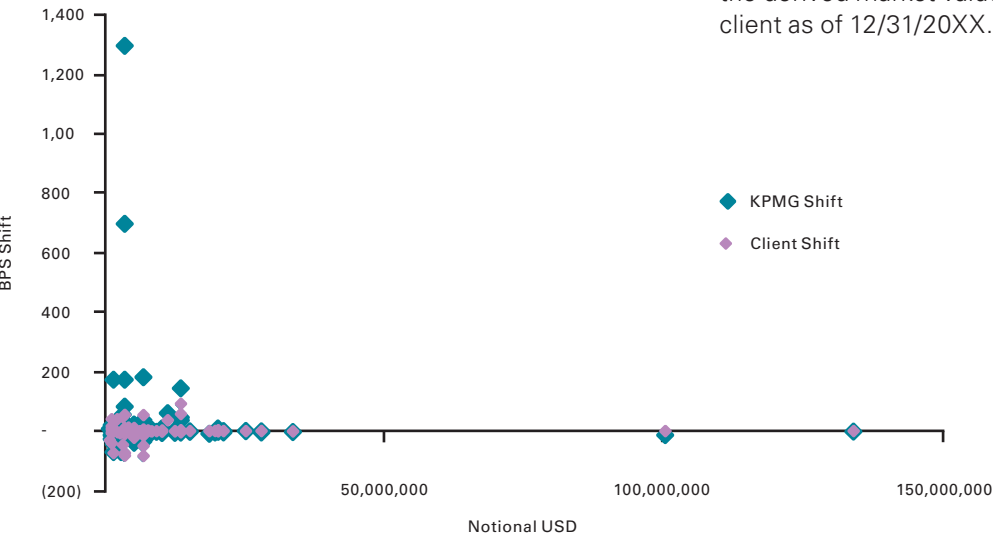Conservative valuation approach compared to asset management peer group

Example 3
Price Analysis for Credit Default Swaps

The **KPMG iRADAR** processed 220 of the 232 CDS contracts based on an independent model and market parameters. The total net deviation is USD 151k, of which USD -879k can be reconciled to the inherent pricing uncertainties arising from intraday fluctuations of input parameters. The remaining USD 1m result from 9 contracts, 2 of which contribute to 99% of the unexplained variance.

The 12 CDS for which no benchmark value could be derived predominately relate to emerging market debt in India and Thailand.

In addition to testing independent parameters, the **KPMG iRADAR** modelled all 232 deals by applying the spreads and recovery rates provided by the client. The table on the lower right corner illustrates the two observations where the derived market value varied from that stated by the client as of 12/31/20XX.

Spread Shift Scatter

Summary

Market Value Deviations	Number of Swaps	Notional USD	MV Client USD	Total MV Deviations USD
Total	220	1,879,360,350	1,742,770	150,811
Within range	211	1,858,996,800	-30,179	-878,788
Out of range	9	20,363,550	1,772,949	1,029,599
Thereof under consideration	2	20,049,000	1,314,647	1,017,897
Remaining	7	314,550	458,302	11,701

Top 2 Variances based on independent CDS Spreads

Name	MV Client USD	Deviation USD	Shift	Client Spread
Example Bank PLC 5 (20-JUN-2015)	-649,806	-164,832	1,298	5,273
Example Finance 5 (20-SEP-2015)	1,260,779	159,516	669	3,863

Top 2 Variances based on client CDS Spreads

Name	MV Client delivered	MV Client reconciled	Deal Spread	Client Spread
CDS Example Bank (B) 1 (20-DEC-2015)	1,011,925	574,237	100	218
CDS Example Bank SA-NV 3 (20-MAR-2015)	302,721	92,187	300	325

Example 4
Price and Fundamental Analysis for Securitizations - CLO

For the analysis of the CLOs, the **KPMG iRADAR** applied a fundamental valuation in which the performance of the underlying loan pool was simulated and the resulting cash flows were applied according to the waterfall structure. The expected cash flows per tranche were discounted at a corresponding market rate. Within such an analysis the most relevant input parameters are default, recovery and prepayment rates as well as the discount margin.

The chart on the right, shows the sensitivity of the tranche's value for each of the selected transaction towards the expected default rate. As the scope of the analysis includes mezzanine tranches only, the effect of changes in parameters will only be material if rather extreme scenarios are considered.

The analyzed CLO's deviations, stated below, are within our expected range. The total deviation amounts to USD 34k.

Valuation Results for CLOs

The KPMG iRADAR's Independent Price Analysis								The KPMG iRADAR's Peer Group Analysis[1]		
ISIN	Name	Category	Original/ Current Rating	Notional EUR	Market Value Deviation USD	Client Price	The KPMG iRADAR's Reference Price	Industry Average Price	Standard Deviation	Number of Contributions
XS0000000001	Example 1 CLO, Class D	Cash Flow Corporate Loan CLO	BBB-/B	800,000	1,765	54.80	54.63	50.33	7.6	3
XS0000000002	Example 2 CDO I-R, Class E	Cash Flow Corporate Loan CLO	BB-/CCC-	1,500,000	32,479	49.00	47.38	42.25	0	2

1 Shows the average prices observed for these particular instruments based on the **KPMG iRADAR's** database: asset management peer group only

Results CLO Modelling – 60% Recovery Rate