Asset Valuation: Creating Certainty out of Uncertainty
Life Conference 2016: Workshop A1

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Agenda

- Valuation Governance and Valuation Uncertainty
- Insurance Comments
- Case Study
- Conclusions.
Valuation Governance and Valuation Uncertainty
Valuation Governance and Valuation Uncertainty

• What has changed?

- GENPRU 1.3
  - Year: 2006

- Asset Risk Review
  - 2012

- IFRS 13
  - 2013

- EBA Guidelines on Prudent Valuation
  - 2014

- ABI Guidelines
  - 2014

- SS 9/14
  - 2014

- Solvency II
  - 2016

• Who is impacted?

- Insurers
- Asset Managers
- Asset Servicers

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PRA Supervisory Statement SS9/14 - Valuation Risk for Insurers

- Firms assessment and quantification of valuation uncertainty should be appropriately robust and complete

- The PRA require all non-Directive firms (NDFs) to monitor and manage valuation risk

- Solvency II contains the same requirements covered in this statement

- Quantification of valuation uncertainty must be underpinned by suitable standards of financial asset valuation governance and control

- The PRA require firms to maintain a level of independence in valuing assets, suitable controls over valuation models and consistent governance of internally and externally managed funds.
Regulatory expectations in respect of VG and VU

Governance and processes in place over valuation

- Demonstrating sufficient independence in valuation of assets
- Adequate review and challenge
- Consistency of this review and challenge across portfolios managed internally and externally
- Where there is no adequate governance and controls, how does this impact valuation uncertainty?

Quantification of valuation uncertainty a prudent valuation

- Implementing a robust and complete process to determine valuation uncertainty
- Addressing that risk by identifying a range of values of the instruments in the portfolio at the reporting date and time
- Consider valuation uncertainty for illiquid assets and vanilla assets for highly concentrated positions.

Adequate documentation of policies and procedures

- Where valuation uncertainty is considered to be immaterial a robust process should be in place including documentation demonstrating this.

Adequate controls over valuation models

- Having adequate MI in the process to be able to challenge and review the modelled assets
- Understanding the inputs, assumption, mechanism of the modelled assets and ensuring that the models and any changes thereto are approved by a robust governance structure.

PRA’s expectation of price sources

- Where “client supplied prices” are used, the PRA expects insurers to limit and monitor the use of such prices
- If no alternative exists, this should be justified and adequately documented.

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- Understanding the inputs, assumption, mechanism of the modelled assets and ensuring that the models and any changes thereto are approved by a robust governance structure.

Governance and processes in place over valuations

- Demonstrating sufficient independence in valuation of assets
- Adequate review and challenge
- Consistency of this review and challenge across portfolios managed internally and externally
- Where there is no adequate governance and controls, how does this impact valuation uncertainty?
Practical Insights in respect of VG and VU

Industry Insights and Challenges

**Governance and processes in place over valuations**
- 3 lines of defence
- Restructure of committees
- Seniority of challengers
- Outsource oversight
- MI on valuations and VU.

**Quantification of valuation uncertainty a prudent valuation**
- Market Norm, Complexity of models and access to information
- Certain asset classes being more challenging
- Embed new processes for assessment
- Concentration risk assessments.

**Adequate documentation of policies and procedures**
- Managing changes in rules
- Increased expectation of evidence
- Qualitative and quantitative justification
- Alignment and consistency across all asset classes.

**Adequate controls over valuation models**
- Need for stronger governance
- Attention from senior level committees
- External models
- Independent price verification.

**PRA’s expectation of price sources**
- Clarity of price sources
- Process to identify client supplied prices
- Policy to define client supplied prices
- Assess liquidity and materiality
- How should controls and governance differ?
Solvency II Considerations for VU

Solvency Capital Requirement (SCR)
Valuation risk to be considered in Solvency Capital calculations.

Own Risk and Solvency Assessment (ORSA)
VU addressed in the ORSA if it is considered significant.

Solvency II governance considerations
Governance to satisfy the requirements in Article 263 of the Solvency II Delegated Regulation.

Valuation Uncertainty disclosures in the public Solvency and Financial Condition Report (SFCR) and private Regular Supervisory Report (RSR)
Hot topic: Independent Price Verification (IPV)

Key areas of consideration

**IPV processes and consistency across different parts of the group**
- Inconsistent pricing methodologies/sources
- Different thresholds/approvals
- Escalation procedures
- Conflict resolution

**VU quantification and assessment of price dispersion by asset class driven by IPV**
- Prevent control for mitigating valuation risk
- Identifying valuation uncertainty drivers
  - Validate VU ranges

**Oversight of third party providers**
- Validation of MI from third party advisors (TPA)
- Understanding TPA valuation methodology
- Skills & capabilities of external parties selected for IPV

**Independent review and IPV of model inputs**
- Model inputs assessment by an independent team/third-party
- Frequency and extent of assessment
- Manage model risk

**Enhancing Prudent valuation methods cross industries**
- Direction of applying consistent methodologies across the different financial services industries
Relationship between Insurer and outsourced asset service provider (asset manager)

- Asset owner - insurer
  - Owner of valuation methodology
  - Responsible and liable for adjustments
  - Independent governance
  - Decision maker
  - Demonstrate compliance.

- Asset manager
  - Service provider
  - Data access
  - Specialist knowledge
  - Operational input
  - Internal or External relationship.

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Key challenges with asset service provider

Outsourcing policy – reporting and monitoring

Internal Vs External

Service provider skills and capability

Service Level agreements

Risk, Operations and controls at the outsourcer
Interdependencies in the valuation process

<table>
<thead>
<tr>
<th>Asset Owner</th>
<th>Asset service provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall responsibility for valuation for financial and regulatory reporting</td>
<td>Provide valuation information</td>
</tr>
<tr>
<td>• Do we understand what data we need and when by?</td>
<td>• What changes do we need to make to our pricing service and process?</td>
</tr>
<tr>
<td>• How do we provide independent review and challenge of prices?</td>
<td>• What level of detail do we need to provide in the pricing information?</td>
</tr>
<tr>
<td>• Are our governance procedures robust around review and ownership?</td>
<td>• How should this information vary daily/monthly?</td>
</tr>
<tr>
<td>• Do we need to review our valuation policies in light of the new requirements?</td>
<td>• Can we source this information from third parties or internally?</td>
</tr>
<tr>
<td>• What is the financial statement impact and can we explain this to investors?</td>
<td>• Have we clarified governance/responsibilities with the asset owners?</td>
</tr>
</tbody>
</table>

Accounting and regulatory considerations

Business/operational impact

Governance

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Insurance View
Everything’s Uncertain!

- All assets on the balance sheet have some element of uncertainty
- As a generalisation – VU order

- Although each of the above can have simple or highly complex variants
- VU is an interesting challenge when an insurer is a buy and hold investor.
Insurance View
Part of your overall framework
Insurance View

End to End Process, Ownership & Governance are Key

• Ongoing governance/oversight
• Combination of expertise – actuarial/accounting/investment/credit/risk/operations
• Due Diligence / Risk Assessment for Investments
• Valuation Uncertainty embedded in new asset processes
• Risk Appetite for assets
• Standard Methodologies
• Clear SLAs for Valuation
• Independent Challenge
• Needs to be a so what.
Insurance View

VU Issues

- Market volatility and changing liquidity
- Single Price Sources
- Reliability of market data provided
- Reliability of counterparty data provided / credit rating info
- Model Risk
- “Non material” features ignored
- Implementation/consistency of adjustments/overrides
- Suitability of Proxies.
Case Study
Valuation Uncertainty Approach
Case Study

Due Diligence - New Investment

An investment bank has approached you with an investment opportunity to invest in a new private placement with an unrated power utility company who want to raise Finance for a new set of developments

- **Due Diligence analysis using specialist legal team with experience of insurance requirements for investments with oversight from Insurance Asset team. Asset features shown on next page. Apart from Option shown no other non-standard features identified**

- **An internal rating methodology exists for utility companies that is suitable for this asset/counterparty. Comes out at A+**

- **Suitable risk appetite for the counterparty/sector/proposed rating/illiquid nature exists for the asset**

- **There is sufficient capital/liquidity available for funding.**
Case Study

Asset Features

Asset Features are:

• Senior secured lending to single legal entity that makes up company
• Government support/incentive package for company developments
• £100m Investment
• Fixed Income, 2% margin over mid swap rate (fixed on day of transaction), single bullet redemption in 10 years time
• No voluntary prepayment allowed
• Standard prepayment clauses on illegality of lending/regulatory/tax changes
• One option exists: if company gets 2 external ratings (from insurers ECAIs) and both show AA+ or greater rating margin would reduce to 1.8%.

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Case Study
Valuation Approach

- Discounted Cashflow Model
  - Contractual cashflows projected for 10 years
  - Discount curve comprised of 3 components:
    • Risk free
    • Credit Spread (using proxy assets)
    • Illiquidity Premium

- Rating feature
  - Could just assume lower margin now, or after a fixed period
  - Could create a probability weighted coupon based on sensitivity analysis of internal rating
  - Build stochastic projection based on historical transition/sector analysis/individual asset analysis
  - Assess whether any market proxies.
Case Study
Valuation Uncertainty Review

Identify key valuation uncertainty risks:

• Application of model & data feeds have been reviewed and suitable controls in place

• Credit Spread
  – Suitability of proxies / sample size
  – Sector/market differentials

• Illiquidity Premium
  – Transaction Pricing / Recent trades / deals
  – Illiquid tradables / Proxies

• Option value
  – Risk drivers.
Case Study
Valuation Uncertainty Considerations/Analysis/Reporting

- Initial review & proposal
- Ongoing MI & reporting
- Comparison across portfolio
- Hedging of option risk
- External insight/challenge
- Tolerances & Stress testing
- Whole Balance sheet impact understanding
- Links with Capital.
Conclusions

• Valuation Uncertainty Requirements are here to stay in Solvency II and need to be taken seriously

• A variety of tools are available to assess/monitor VU the results of which need to be reported to those charged with governance on a regular basis

• Businesses need to use the combined professional skills of their accounting/actuarial/operational/investment teams and outsourcers to deliver a suitable framework

• Strong Processes and Governance are key and clarity of ownership and control across the valuation cycle between the Insurer, Asset Manager and Asset Servicer is important.
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