Murex - Capital and Margin Reforms in Asia – Implementation and Impact
The State of Global xVA Standards and their Adoption in Asia
Jon Gregory, 22\textsuperscript{nd} November 2016
We May Struggle to Agree on What We Mean by xVA

Salesperson: suppose you charge me CVA and then the counterparty never defaults. What happens to my CVA?

CVA trader: I probably use it to hedge my cross gamma
Economic, Accounting and Regulatory Drivers of xVA

- **Capital**
  - Fees, etc
  - Prudent Valuation (AVA)
    - Leverage Ratio
    - CVA Capital Charge
    - CCR Capital Charge
    - Market risk

- **Initial margin**
  - Clearing mandate
  - CPSS-IOSCO rules

- **Funding**
  - NSFR
  - LCR
  - Economic funding

- **Credit**
  - IFRS 13 Accounting
  - Credit line utilisation
  - Credit provisioning

- **Additional profit**
  - KVA

- **Profit to generate return on capital**
  - MVA

- **Real costs**
  - FVA

  - CVA
Competitive Pricing is Still Diverging

- Cross-currency swap with double-B corporate (uncollateralised, no refix)
OTC Derivatives Pre and Post Financial Crisis

• Pricing has not changed
  – Transactions still priced rapidly even though they are seen as dramatically more complex

• xVA is derivatives pricing
  – So why do so many banks misprice? No arbitrage opportunities, just a winner’s curse

Traders shocked by $712m CVA loss at StanChart

Feature - Tue 15th Mar
Bank’s new methodology has been used by some rivals for more than a decade

• Still no long-term incentive

Is any portion of the capital charge currently withheld?

- No - released immediately into P&L
- Yes - released over time
## The Move to a Long-Term View

<table>
<thead>
<tr>
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<th>Traditional bank approach</th>
<th>Best Practice</th>
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<tbody>
<tr>
<td>CVA</td>
<td>Trading desk and sales division face default losses</td>
<td>CVA pricing, accounting and central management</td>
</tr>
<tr>
<td>FVA/MVA</td>
<td>Treasury funds the bank and charges trading desk overnight funding</td>
<td>FVA inception pricing, accounting and central management</td>
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<td>ColVA</td>
<td>Collateral management manages operational aspects of collateral.</td>
<td>ColVA inception pricing, accounting and central management</td>
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<td>KVA</td>
<td>Trading desk is charged for capital and businesses set soft return on capital metrics</td>
<td>Capital is priced directly into transactions via hurdles and released over the lifetime</td>
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The Global View on xVA

• **For large banks with big derivatives balance sheets, xVA is part of business**
  – xVA desk, IMM approval, active management, reg. capital part of the decision making process
  – Adjustments taken for change in methodology (e.g. CVA) or newly discovered costs (e.g. FVA)

• **For very small banks (in derivatives terms), xVA is a nuisance**
  – IFRS 13 and Basel compliance?
  – Pricing with some credit, funding and capital charge

• **Across a derivatives business there are multiple costs (and benefits)**

• **They co-exist and are not mutually exclusive**
  – A consistent treatment is therefore important
Not all counterparties have traded credit spreads. However, the FRTB-CVA framework must capitalise CVA risk arising from dealing with all counterparties, including ones that are not actively traded in credit markets ("illiquid counterparties"). Therefore, in order to use the FRTB-CVA framework, a bank is required to have a methodology for approximating the credit spreads of illiquid counterparties (see Section B.1(f) of the draft Accord text).

Banks normally develop the capability of calculating CVA sensitivities in order to manage their CVA risk. Typically, CVA risk management is performed by a dedicated function, such as the CVA desk. CVA sensitivities calculated by a bank without any internal function to use them would not be deemed reliable. Thus, the existence of a dedicated CVA risk management function will be a requirement.
### FRTB May Define Two xVA Business Models

<table>
<thead>
<tr>
<th>Active Approach</th>
<th>Passive Approach</th>
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<tbody>
<tr>
<td>Central resource management (xVA desk)</td>
<td>No centralised approach</td>
</tr>
<tr>
<td>Map to “illiquid” credit spreads</td>
<td>Illiquid credit risk still dealt with in real world</td>
</tr>
<tr>
<td>Active and consistent management of CVA, FVA, MVA, etc</td>
<td>No active management</td>
</tr>
<tr>
<td>Lower capital charges (SA-CVA and maybe IMM)</td>
<td>Higher capital charges (SA-CCR and BA-CVA)</td>
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<tr>
<td>Capital relief from hedges</td>
<td>No capital relief (hedges may use capital)</td>
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<td>Long-term view on return on capital (KVA) vs. P&amp;L</td>
<td>P&amp;L centric</td>
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<tr>
<td>Correct and consistent pricing and valuation (novations, restructurings, backloading, etc)</td>
<td>Potential for inconsistency as xVA is not dealt with holistically</td>
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<td>Optimises around initial margin, capital, P&amp;L etc.</td>
<td>Struggles to define what is optimal</td>
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<td>Active derivatives player</td>
<td>Only trades derivatives where critical</td>
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