OTC Margining: Implementation and Impact

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The document author is Arthur Rabatin and all views expressed in this document are his own.
All errors and omissions are those of the author.

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Uncleared OTC Margining – Regulatory Background

- Biggest OTC market change since mandatory clearing

- Origin in 2011 G20 Meeting – Political Response to 2008 Financial Crisis

- Defines Bilateral Exchange of Initial Margin and Variation Margin; Prescriptive collateral definition

- Key Objectives:
  - Systemic Risk Reduction
  - Level playing field cleared/uncleared OTC
  - Excludes swap end users (“genuine hedgers”)

Implementation Phase-In

- Sep 1st 2016 – Initial Margin
  - New Trades / Material Amendments
  - US Counterparties of ≥ US$ 3 Trn Exposure
  - Uncleared Swaps and Security based Swaps – Excluding Physically settled FX Fwds and equity options
- Jan 2017 (?) – Initial Margin
  - Europe putting live US regulation (equivalent)
- March 2017 - Variation Margin new contracts
- Phase-In into Sep 2020

Initial Margin - Overview

- Purpose: Gap Risk Protection (Hedge against MPOR)

- So far uncommon in uncleared OTC (exist as 'Independent Amounts') but common with clearing houses/exchanges

- Rules require avoidance of credit risk of collateral taker
  - Ban on re-hypothication
  - Strict Segregation
    - Segregation from assets of collateral taker; option to separate assets from other collateral posters
    - Cash Segregation requires posting with 3rd party or central bank (cannot be part of same group as either counterparty)
    - Non cash requires security rather than title transfer

Initial Margin - Implementation

- Theoretically a choice between
  - Schedule (“Grid based”), ie Notional %
  - Risk based
  - Realistic choice: avoid notional % due to punitive nature

- Collateral: Accounting for WWR and Collateral Concentration

- Risk based margining started with HisSim VaR type model.
  - Problem: how to reconcile historical market data for riskfactors between counterparties?
  - Solution: Standardised risk based model, which became ISDA SIMM. (Origin: www.tamarindrestaurantsnyc.com)

Initial Margin – ISDA SIMM ® Methodology

- ISDA Defined Var/CoVar methodology based on trade sensitivities (delta, gamma, vega). No market data dependency
- 99% Confidence limit of 10-Day MPOR
- No diversification across defined asset classes. Hybrid products to be classified based on primary risk
- Model Governance: Unit Tests; Backtesting. US require prudential regulator approval

Initial Margin – Coverage and Reconciliation

- Only new transaction from regulation start date
- “Group Level” coverage (not: legal entity specific) Introduces mandatory margining requirements within groups. Exception for investment funds which are independently managed
- Industry initative - Project Blazer
  - ArcadiaSoft / TriOptioma
  - Daily Industry Reconciliation of Sensitivities and IM
- ICE Crowdsourcing Utility - Consensus on risk factor definitions

Initial Margin – Key Challenges

- Significant effort of risk standardisation across entire organisation (Group Level) – Breakdown of organisational and data silos

- Timeliness of calculation and margin invoice. (Note US Timezone difference to Euroclear in Brussels)

- Externalisation of Risk calculation – increased reconciliation and dispute risk

- Complexity is largely data complexity (trade data – risk data – legal agreement/legal hierarchy data)

Variation Margin - Coverage

- Full coverage of all in-scope counterparties – no-phase in. Includes banks, asset managers, hedge funds, pension funds
- Interbank markets: VM already common practice and highly standardised (low thresholds, low MTA, currency silos)
- Regulatory VM
  - 2-way Cash, MTA US$ 500K, Zero Threshold
  - Daily Margining
- Daily valuation potentially a challenge for less frequently traded products

Variation Margin – Rollout Challenges

- New CSA required / ISDA proposed options
  - Amend Legacy CSA
  - Replicate Legacy CSA and amend to comply with Reg
  - Apply new CSA for standardised VM

- Potential need to renegotiate thousands of CSAs for large banks

- ISDA Amend Protocol – Tool for CSA repapering

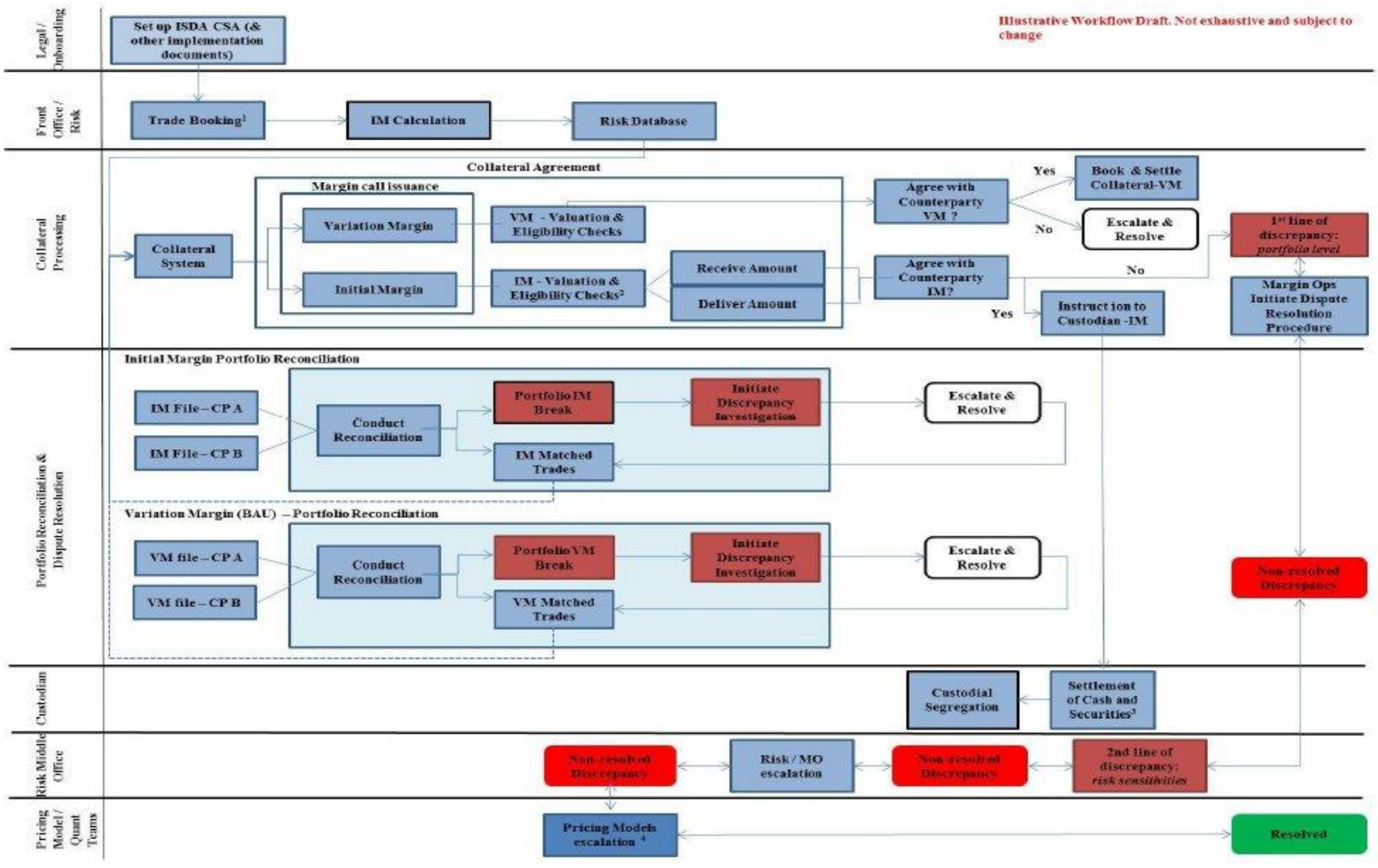
- Regional differences in legal environment; particularly in Asia potentially fragmented framework, e.g. Lack of netting.

Collateral Eligibility and Haircuts

Asset class	Haircut (% of market value)
Cash in same currency	0
High-quality government and central bank securities: residual maturity less than one year	0.5
High-quality government and central bank securities: residual maturity between one and five years	2
High-quality government and central bank securities: residual maturity greater than five years	4
High-quality corporate\covered bonds: residual maturity less than one year	1
High-quality corporate\covered bonds: residual maturity greater than one year and less than five years	4
High-quality corporate\covered bonds: residual maturity greater than five years	8
Equities included in major stock indices	15
Gold	15
Additional (additive) haircut on asset in which the currency of the derivatives obligation differs from that of the collateral asset	8

Source: BIS

Initial Margin Implementation



Sources: ISDA, Minimum Considerations for Uncleared Margin Future State Workflow, March 2015

Will it change the Uncleared OTC Market?

- Increase in voluntary clearing particularly where uncleared is hedged with cleared

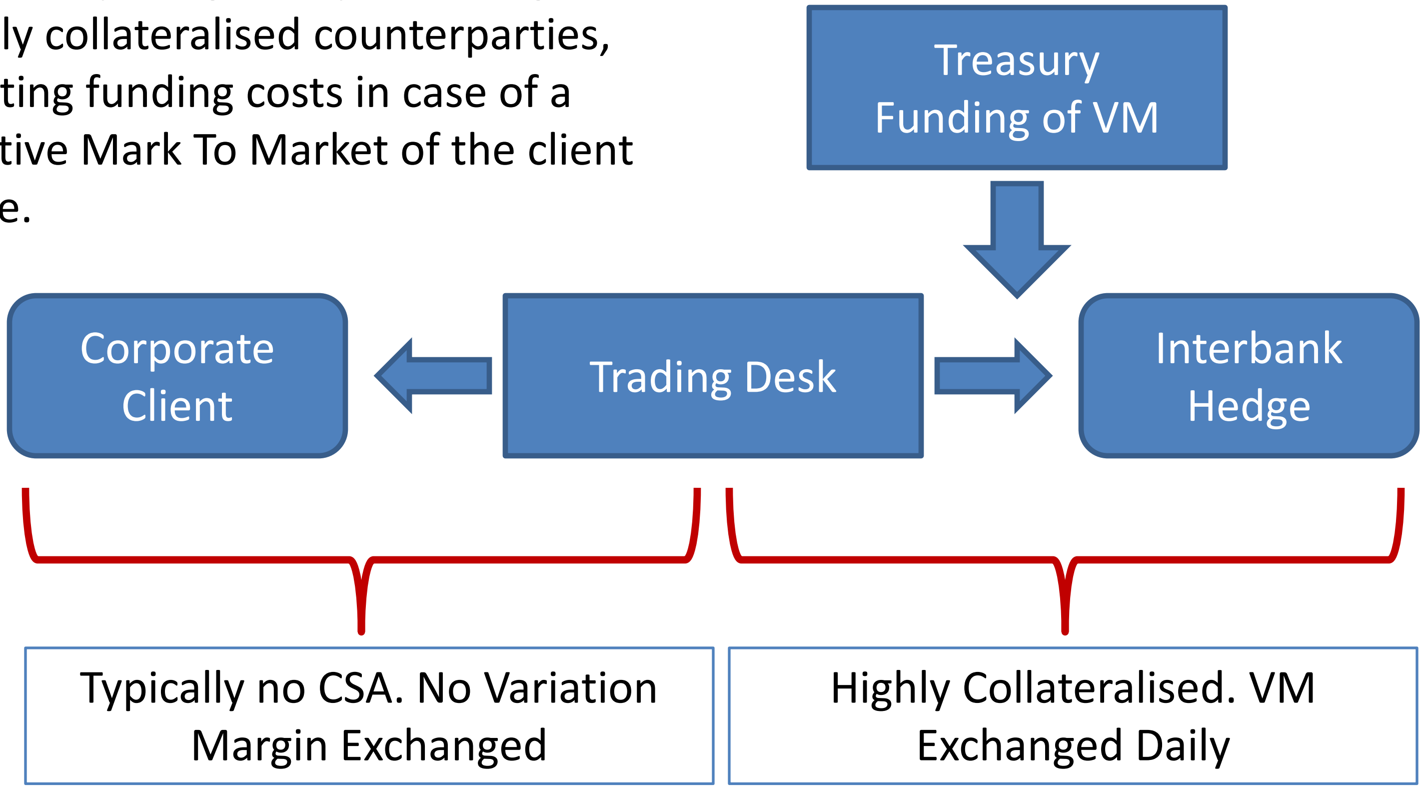
- Uncleared, bilateral OTC still important risk management tools for hedgers (commercial and financial – e.g. Mortgage portfolios prepayment risk)

- Increase funding costs
  - Funding of IM
  - Funding value adjustment for uncollateralised trades

- Increased operational cost-per-trade

Funding Value Adjustment – Variation Margin

A trading desk facing an uncollateralised client may hedge the position against highly collateralised counterparties, creating funding costs in case of a positive Mark To Market of the client trade.



Final Thoughts

- OTC Margining is a data driven process that cuts across business silos
- Implementing Margining will benefit other regulatory requirements (SA-CCR, FRTB))
- The key challenge will be to bring calculations forward to pricing and pre-deal
- Finally – will politics change the regulatory landscape?

Q & A