

# ***CCP Clearing of Derivative Products***

***Conference on Derivative Markets –  
Issues & Challenges  
28<sup>th</sup> June, 2014***

# Clearing Obligation

- G 20 decisions for derivative trades
  - ✓ Trading through Exchanges/Electronic Trading Platforms
  - ✓ Central Clearing
  - ✓ Reporting Trades to Trade repositories
  - ✓ Non-centrally cleared derivatives would have higher capital requirement
- Impacts different entities differently & has far reaching consequences

# Instruments for Clearing

- To take into consideration
  - ✓ Degree of standardisation
  - ✓ Volume & liquidity
  - ✓ Availability of fair, reliable and generally acceptable pricing information
- Can be a combination of Bottom Up & Top down approaches (Regulators & CCPs)
- Clearing Obligation may be triggered by the first CCP authorised to clear
- Asset classes: Commodity, Credit, Equity, Interest Rate & Foreign Exchange

# Contribution of a CCP in market development

- Becomes counterparties to all trades of its clearing participants
- Enables multilateral netting
  - ✓ Liability Netting
  - ✓ Settlement Netting
- Risk reduction
  - ✓ Counterparty Risk
  - ✓ Liquidity Risk
  - ✓ Operations Risk
- Most of the counterparty & liquidity risk reduction to the system is realised through efficient netting

# Issues in Dealing with CCPs

- Concentration Risk  
(far lower than aggregate risk in the market due to netting – *multiple CCPs may not help*)
- Fragmentation of Liquidity
- Requires more Collateral  
(not so if bilateral margining in place)
- Rigidity in Product Structure
- Standard Operating Procedure
- System exposed to a single pricing model

# Issues in Dealing with CCPs (Contd.)

- Increase in inter-connectedness
- Legal challenges
  - ✓ Netting
  - ✓ Insolvency of System Participant or of System Provider
  - ✓ Cross Border Issues
  - ✓ Resolution of CCP
- Inter-operability between market infrastructures

# Fragmentation of liquidity

- **Liquidity Splits**

For whom? For Large players?

*Ans* Yes on the face of it.

*But,* is this the whole story?

- ✓ What about for other than large players?
- ✓ Is it economically more desirable?
- ✓ Implication of CCP failure?

*Recent study indicates that –*

liquidity fragmentation more from Dark Pools & Algorithmic Tradings – non-exchange trading up to 35% from 15% five year before

# Higher cost from Mandatory Clearing

- Increased Cost:
  - ✓ Cost to maintain margins
  - ✓ CCP charges
  - ✓ lost opportunities from standardisation
- Cost Savings:
  - ✓ from counter-party exposure reduction
  - ✓ opportunities from more liquid market with more certainty
  - ✓ reduction in manpower cost in mid & back offices
  - ✓ reduction in IT cost
  - ✓ Reduction in liquidity & capital requirements due to netted exposures & settlements

*Cost Savings & benefits would normally far outweigh the increased cost.*

# Collateral Shortage

- **Industry estimate (ISDA) –**
  - ✓ USD 1.7 to 10 trillion collateral required  
only to meet IM requirement on non-cleared trades
- **BIS estimate -**
  - ✓ USD 4 trillion
  - Including for higher collateral European banks are required to provide & banks holding higher collateral for other Regulatory requirements
  - *“no evidence of lasting or widespread scarcity”*
- **Outstanding Govt debt rated AAA- or AA- grew by USD 10.8 trillion in last 5 years**

# Cross-border issues – Dodd Frank & EMIR

- **Dodd Frank requirement –**
  - ✓ Focus on “Swaps” & “Security based Swaps”
  - ✓ Derivative Clearing Organisations required to register
  - ✓ Concept of *Substituted Compliance*
    - Power to grant exemptions
  - Oversight over branches of foreign banks
- **EMIR –**
  - ✓ Focus on “OTC Derivatives”
  - ✓ Recognition of CCPs including of Third Country CCPs
    - No discretion to allow exemption from ESMA provisions
- **Other jurisdictions – similar provisions??**

# Products through Lifecycle

- Lifecycle Processing
- Margin Maintenance
- Client trades – ownership change
- Client default
- Default by Clearing Member
  - segregation & portability
- Default by any other large clearing member –  
use of Default Fund balance
- Failure of CCP

# Trades not cleared by CCP

- Implications for market participant
  - ✓ Counter-party risk management issues
  - ✓ Increase in margins, if part of a set of trades is cleared by CCP
- Implication for stakeholders
  - ✓ Trade Repositories should capture such trades & assess possible economic consequences at various levels for viewing by the involved entities & by their Regulators
  - ✓ Higher margins for non-cleared trades

# CCIL- Indian CCP in OTC Market

- Indian Scene – CCIL
  - ✓ Well-established and having internally developed systems and processes
  - ✓ Exclusively for OTC markets
  - ✓ Strong regulatory control
  - ✓ Compliant with PFMI
  - ✓ Use of Anonymous Trading Systems, Trade Repository and Portfolio Compression for increased market efficiency.

# Forward Foreign Exchange (Rupee/US Dollar) Outstanding trades over the years

Period	(Amt in USD billion)		
	Outstanding Trades		Amount under CCP Clearing
	No. of Trades	Amount	
Jul'09	37,094	277.26	0
Dec'09	34,598	254.61	14.14
Dec'10	42,961	375.5	65.19
Dec'11	56,579	487.77	88.18
Dec'12	51,359	457.54	124.47
Dec'13	43,589	360.06	98.74
Jun'14	54,604	451.33	206.35

- ❖ Entire volume expected to be under CCP Clearing in next few months.

# CCP Clearing of Forex Forward trades

- ✓ *Operational since:* Dec '09
- ✓ *Eligible Participants :* Banks which are AdS
- ✓ *Currency Pairs :* Rupee/US Dollars
- ✓ *Maximum Maturity of trades :* 13 months
- ✓ *Guarantee from the point of matching*
- ✓ *All outstanding trades aggregated for margining*
- ✓ *Benefits : Considerable reduction in net exposure as compared to gross value of the trades & huge reduction in counter-party exposures*

# Rupee Interest Rate Swap Market Market Size over the years

Period	No. of Trades	Notional Value (Rs. Crores)
Dec '07	67,645	3,561,190
Dec '08	47,038	2,700,086
Dec '09	35,150	1,811,912
Dec '10	50,986	2,918,159
Dec '11	49,470	2,978,649
Dec '12	28,409	1,843,407
Dec '13	27,721	1,969,775

- ❖ *Outstanding trade volume coming down through Portfolio Compression & other early terminations – new trade volume is also low.*

# CCP Clearing of Interest Rate Swaps

- ❖ *Eligible Participants – Market Makers as per the RBI definition (all Banks and PDs presently reporting their trades to the CCIL's Rupee Derivatives Trade Repository)*
- ❖ *Trades – IRS & FRA trades*
- ❖ *Benchmark – MIBOR & MIOIS*
- ❖ *Tenor - up to 10 years*
- ❖ *Trades in other benchmarks to be settled through CCIL's Non-Guaranteed Settlement OR bilaterally*

# Trade Repository

- ❖ *Instruments Covered- IRS & FRA with MIBOR, MIFOR & INBMK as Benchmark*
  - ❖ *Information dissemination through CCIL website – of matched trades of standard tenors*
  - ❖ *Post Trade Processing by CCIL – Interest Resets, Computation of Settlement Obligations, Details of Outstanding trades, Accounting for Cancellation & Reversal of trades etc.*
  - ❖ *Settlement of daily obligations on non-guaranteed basis (commenced in Nov'08)*
  - ❖ *Portfolio Compression to bring down outstanding trade volume in the market.*
- *CCIL is also developing an Anonymous Trading System for trading IRS*

**Thank you**