Swap Package Transactions CFTC Technology Advisory Committee

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Definition

- **Package transactions** involve the simultaneous pricing and execution of two or more component instruments
- Combination of "buys" and "sells" (or "payers" and "receivers")
- Reasonable and quantifiable degree of correlation between the components
- **Risk** of the offsetting components is approximately **equivalent**



Examples

- Swap Curve: Package of two swaps of differing tenors
- Swap Butterfly: Package of three swaps of differing tenors
- Unwind / Offset packages: Portfolio of swaps of differing tenors
- Swap Spreads: Government bonds vs. swaps typically within similar tenors
- MBS Basis: TBAs (Agency MBS) vs. swap spreads
- Invoice Spreads: Treasury-note or Treasury-bond futures vs. swaps
- Cash / Futures Basis: Eurodollar futures bundles vs. swaps
- Delta-Neutral Option Packages: Caps, floors, or swaptions vs. swaps

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Economic Benefits

Tighter bid-offer spread

Package has lower market risk than each outright, directional leg

Single vs. multiple bid-offer spreads

Separate execution requires paying the bid-offer on each leg

More efficient risk transfer and hedging

Only net risk is exchanged, rather than outright risk on each leg

• Elimination of "legging risk"

Risk that the market moves between the execution of each leg



Representative Analysis of Transaction Costs Swap Spread (Swap vs. Treasury)

Execution as Two Separate Legs

- Pay 4.15 bps vs. mid of 3.75 bps
- Effective price = 0.4 bps
- X \$90,000 (DV01 per \$100mm notional on a 10Y swap spread)
- Transaction Cost = ~\$36,000

Execution as a Package

- Pay 3.875 bps vs. mid of 3.75bps
- Effective price = 0.125 bps
- X \$90,000 (DV01 per \$100mm notional on a 10Y swap spread)
- Transaction Cost = ~\$11,250

Market pricing (as observed the morning of November 20, 2013)

Product	Bid	Ask	Implied Mid
10Y Treasury	2.7045 %	2.7085 %	2.7065 %
10Y Swap	2.742 %	2.746 %	2.744 %
10Y Swap Spread	3.625 bps	3.875 bps	3.75bps



Representative Analysis of Transaction Costs Swap Curve (Swap vs. Swap)

Execution as Two Separate Legs

- Pay 132 bps vs. mid of 131.55 bps
- Effective price = 0.45 bps
- X \$50,000 (DV01 per \$100mm notional on a 5Y swap curve)
- Transaction Cost = ~\$22,500

Execution as a Package

- Pay 131.7 bps vs. mid of 131.55 bps
- Effective price = 0.15 bps
- X \$50,000 (DV01 per \$100mm notional on a 5Y swap curve)
- Transaction Cost = ~\$7,500

Market pricing (as observed the morning of November 20, 2013)

Product	Bid	Ask	Implied Mid
5Y Swap	1.426 %	1.430 %	1.428 %
10Y Swap	2.742 %	2.746 %	2.744 %
5/10 Swap Curve	131.4 bps	131.7 bps.	:131.55 bps:



Select Items to Address

Multi-swap package transactions

Communication protocol and credit limit checking of net risk

Swap spreads

Guaranteeing settlement of the US Treasury leg

Invoice spreads

Separate regulatory regime for swaps and futures

"EFRP" model for swaps

Transferability of the futures market's solution for package transactions



Recommendations

- Do No Harm As a threshold matter, avoid breaking up the simultaneous pricing and execution of package transactions
- Identify Issues & Solutions For example:

For Multi-Swap Package Transactions...

Collaborative industry enhancements to the execution-to-clearing workflow that support these package transactions

For Swap vs. Non-Swap Package Transactions...

Development of execution paradigms / protocols that are viable for these package transactions (including an "EFRP" style process for swaps)

Provide Time to Implement Solutions for Package Transactions

