

Regulation of Derivatives Trading

September 2010

| New York | Boston | London | Tokyo | Hong Kong |

Tradeweb — Background



Tradeweb is a leading provider of online markets and a proven innovator in global electronic trading

- Formed in 1996
- Pioneer in developing fixed income electronic trading
- Leader in electronic trading of government bonds worldwide
- First to automate multi-dealer-to-customer derivatives trading online
- Front-to-back electronic solutions for both buy- and sell-side institutional traders
- Established global connectivity with clearinghouses and trade repositories

Growth and expansion of Tradeweb's institutional fixed income business since inception:

	1998	2010
Markets	1	20
Liquidity Providers	5	45
Liquidity Takers	10	2,000+
Average Daily Volume	\$500 Million	\$300 Billion+
Notional \$ Volume	\$150 Billion	\$400 Trillion
Number of Trades	33,000	18 Million+

Tradeweb's Current Regulatory Status



- In the United States, Tradeweb is a broker-dealer registered with the Securities and Exchange Commission and a member of FINRA.
- The Tradeweb Execution Facility is regulated as an Alternative Trading System pursuant to Regulation ATS under the Securities Exchange Act of 1934.
- The Tradeweb Institutional Fixed Income and Derivatives platform is a fully disclosed Dealer-to-Customer request-for-quote (RFQ) execution facility.
 - Does not hold customer funds or maintain customer accounts.
 - Clearance and settlement is done outside of Tradeweb systems.
- Tradeweb is regulated globally.
 - In Europe, the Tradeweb execution facility is regulated by the UK FSA as a “multilateral trading facility”.
 - Additional licenses in Japan, Singapore, Hong Kong, Australia and Canada.

Participants have been trading OTC derivatives electronically on the Tradeweb execution facility since 2005.

IRS

Currencies: Dollar, Yen, Euro, Sterling, Swiss Franc and Swedish Kronor

- Launched in 2005 with two currencies
- Now 6 currencies
- Over 60,000 trades and \$5 trillion notional since launch
- Over 180 different companies have done a swap trade on Tradeweb in the last 15 months
- 91 trades per day average over the last 8 consecutive months

CDS

Indices: CDX, iTraxx

- Launched January 2005
- Real-time pricing from all 7 participating dealers
- Live, two-sided market pricing for a broad range of CDX and iTRAXX indices
- Unique Trading Protocols – Request for Market (RFM) allows user to request a two-sided, live market from a single dealer.

Recently enacted Financial Reform Bill will have wide-sweeping impact on the OTC Derivatives markets and its participants

Regulators

- Required to draft rules that are consistent with the legislation and which will provide for greater transparency, efficiency, and reduction of systemic market risk
 - Require a majority of swap trades to be cleared (reduce risk)
 - Drive trading of clearable swaps to regulated electronic platforms – SEFs/DCMs/ Exchanges (transparency & efficiency)

Participants

- Concerned that a material disruption to market structure will impact liquidity
- Desire to protect information leakage of trades that could impact market
- Desire to maintain ability to customize terms to tailor to their risk management needs



Tradeweb Solution

The Tradeweb SEF will provide competitive electronic trade execution (RFQ). Solution will provide the required level of pre-trade transparency, meet the applicable core principles, and have electronic post-trade links to all CCPs. The Tradeweb SEF will also allow for block-size trades and voice assisted trades to be captured, traded, and processed.

What is a SEF?

Legislative Language

The term 'swap execution facility' has been defined as a trading system or platform in which multiple participants have the ability to execute or trade swaps by accepting bids and offers made by multiple participants in the facility or system, through any means of interstate commerce, including any trading facility, that- (A) facilitates the execution of swaps between persons; and (B) is not a designated contract market.

Regulatory Interpretation

- SEF definition should not be interpreted merely as a central order book because that would be redundant of the concept of exchanges/DCMs in the legislation
- Interpretation should recognize the distinction between SEFs and DCMs, and as such, should recognize trading models other than pure exchanges – particularly, in light of the manner in which OTC derivatives trade
- Interpretation should be flexible to include various trading models, protocols, participants, access criteria, tradeable instruments, and public post-trade transparencies

What Should a SEF Be?

Consistent with the goals of the legislation, for institutional users, a SEF should:

- Provide pre-trade price transparency from multiple sources that provide an accurate indication of where a trade could get done on the execution facility;
- Incorporate a facility through which multiple participants can engage in competitive trade execution (i.e., must have competition among dealers);
- Be a bona fide venue through which to transact swaps business (e.g., venue must have minimum capital requirements);
- Have the ability to adhere to the core principles that are determined to be applicable to SEFs;
- Provide access to a broad range of participants in the OTC derivatives market, allowing such participants to have access to trades with a broad range of dealers and a broad range of CCPs; and
- Availability to access all CCPs and Trade Repositories

Trading Derivatives on SEFs

Access to
the SEF

Pre-Trade Price
Transparency

Trading Protocol

Clearing

Post-Trade
Reporting

KEY CONSIDERATIONS FOR TRADING OF DERIVATIVES ON SWAP EXECUTION FACILITIES

Key Considerations for Trading Derivatives on SEFs



Access to the SEF

- A SEF's access criteria should be objective and provide for a recognition of the distinction between liquidity providers (e.g., swap dealers) and liquidity takers (i.e., buy-side clients, major swap participants and other participants in the market), which will in turn promote financial integrity and support liquidity in the market
- The key consideration should be to ensure that participants in the derivatives market have access to as broad a range as possible of the true liquidity providers – which will provide a true price-discovery function that might be diluted through a less disciplined, more open-ended exchange-like system

Pre-Trade Price Transparency

- A SEF must have pre-trade price transparency with respect to the instruments available for trading on its facility
- Access to a composite of real-time bid/offer indicative prices (based on prices contributed by participating liquidity providers) allows liquidity takers to spot the market in deciding the price at which they would like to execute

Key Considerations for Trading Derivatives on SEFs



Trading Protocol

- Competition: Create a competitive marketplace that encourages the provision of adequate liquidity to market participants
- Request for Quote Model: A fully-disclosed trading protocol, in which the liquidity taker (the client) can request (and receive) multiple, competitive prices simultaneously; the liquidity makers (dealers) are aware of their identities before a trade is executed, and have discretion as to whether to respond and/or trade with such counterparties. The trades are completed for the full size (i.e., no partial fills).
- Market Participants need to be able to customize deal structures that are tailored to their risk management needs
- Block-Size Trades: SEFs are required to establish rules for block-size trades.
- A block trade for a swap is a swap with a delta or risk material enough to impact the pricing in the market if it were known or reported
- For block trades, must also consider liquidity characteristics of the instrument

Key Considerations for Trading Derivatives on SEFs



Clearing

- A SEF must have equal and fair access to all the CCPs, including equal treatment with respect to technological implementation
- Consider conflicts of interest of execution and clearing done by same venue
- Regulators need to understand the myriad of swaps that are traded because it may challenge the notion of what is “standardized.” It is a market of highly customized trades which are not suited for a typical exchange-traded market

Post-Trade Reporting

- Post-trade transaction reporting requirements should be reasonable to protect provision of liquidity in the marketplace
- Reporting rules need to (i) take into account whether public disclosure will materially reduce market liquidity and (ii) prohibit reporting of information in a manner that identifies the participants to a transaction
- Consider what needs to be real-time v. delayed 30 minutes
- Consider TRACE methodology concerning block size (no specific size reporting above a certain size)
- Consider two types of reporting – reporting to regulators v. reporting to public

Core Principles should be applied with flexibility and consideration for how swaps are traded

Access Criteria for Participants

- A SEFs access criteria should be objective and provide for a recognition of the distinction between liquidity providers (e.g., swap dealers) and liquidity takers (i.e., buy-side clients, major swap participants and other participants in the market), which will in turn promote financial integrity and support liquidity in the market
- The key consideration should be to ensure that participants in the derivatives market have access to as broad a range as possible of the true liquidity providers – which will provide a true price-discovery function that might be diluted through a less disciplined, more open-ended exchange-like system

Criteria for Instruments to be Traded

- Needs to recognize the myriad of swaps that are traded because it may challenge the notion of what is “standardized.” It is a market of highly customized trades, which are not suited for a typical exchange-traded market.

Conflicts of Interest and Governance Rules

- Electronic markets need and benefit from the bank participation in platforms/venues – they possess critical market expertise, and provide capital for innovation and more efficient workflow solutions
- There is a significant conflict of interest where CCPs also own execution venues, and such conflict needs to be resolved through rulemaking requiring equal and fair access of other execution venues to the CCP.
- The agencies should not impose hard caps/percentages of ownership – the approach lacks flexibility and could have unintended consequences

Monitoring for Manipulation and Abuse

- It is imperative for SEFs to have access to sufficient market data to compare to its participants' trade data

Key Considerations for Core Principles



Ability to Obtain Information

- SEFs need the authority from regulators to obtain information from its participants to ensure compliance with its rules and to report transactions and other information to regulators in accordance with the regulatory rules, including timing of reporting

Record Keeping and Reporting

- SEFs need fully-automated audit trail
- Rules need to be fair in respect to ensuring that reporting of certain trades does not impact liquidity
- Consider real time v. delayed reporting

Position Limits or Accountability

- This principle continues to be a big issue in terms of a SEF's ability to understand the parties' positions (i.e., each SEF will need a full market view to enforce this principle). This would require cooperation among all the venues (SEFs, DCMs and CCPs), including position information sharing agreements, so that if a position were exceeded, the SEF could block an execution.

Financial Integrity of Transactions

- Financial integrity of transactions will need to be addressed through SEFs requiring each swap executed on the platform to be sent to a CCP
- SEFs may need to require its swap dealers to have an internal credit check of its counterparties and for uncleared swaps, need ability to enforce documentation between counterparties

Emergency Authority

- SEF will need clear guidelines about communication and coordination with regulators (i.e., when SEF can invoke emergency authority and the notice requirements related thereto) but liquidation or transfer of open positions will be difficult for SEF's

Why is RFQ an Acceptable Model for SEFs?



What is RFQ?

A fully-disclosed trading protocol, in which the liquidity taker (the client) can request (and receive) multiple, competitive prices simultaneously; the liquidity makers (dealers) are aware of their identities before a trade is executed, and have discretion as to whether to respond and/or trade with such counterparties. The trades are completed for the full size (i.e., no partial fills).

A pre-trade composite of indicative prices, combined with a Request for Quote (RFQ) protocol provides the price transparency and competition that the legislation and rulemaking seek to achieve.

Why is RFQ an Acceptable Model for SEFs?



- This model recognizes the distinction between liquidity makers (dealers) and liquidity takers (buy-side clients) – which promotes financial integrity and liquidity on the platform.

The RFQ model strikes the right balance between a buy-side's risk of information leakage based on the number of participants who see the trade, and having available to it a wide range of competitive, dealer quotes.

- The facility should maintain a permanent audit trail of the second-by-second details of each trade negotiation and all completed transactions, and allow parties to receive trade details and access post-trade affirmation and clearing venues.

Conclusion



Tradeweb is supportive of the objectives of the Dodd-Frank Act and believes that it achieves such objectives under its current business model.

Specifically, it:

- ✓ Provides pre- and post-trade price transparency and seamless integration;
- ✓ Ensures efficient trade execution of derivatives;
- ✓ Provides participants in the derivatives market access to as broad a range as possible of the true liquidity providers – which will provide a true price-discovery function that might be diluted through a less disciplined, more open-ended exchange-like system;
- ✓ Provides support for best execution;
- ✓ Generates digital records of all trades and trade inquiries;
- ✓ Maintains a permanent audit trail; and
- ✓ Provides global connectivity to relevant third parties, including clearinghouses and trade repositories.

Appendix

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Pre-trade Price Transparency



Tradeweb's pre-trade prices provide a real-time view of the OTC derivatives market. More than 80% of all derivatives trades on Tradeweb are executed at or inside the pre-trade indicative price.

The screenshot displays two windows from the Tradeweb platform. The top window, titled 'TW Tradeweb On The Run Treasury (COMPOTR)', shows a table of US Treasury securities with columns for Coupon, Maturity, Price, Dealer, Yield, and other metrics. The bottom window, titled 'TW Tradeweb US\$ Swaps (SB 30/360 vs 3M LIBOR)', displays a table of swap rates and spreads, including columns for Term, Price, Yield, and Swap Spreads vs. Trisy.

U.S. Treasuries

Instrument	Coupon	Mty	Price	Dealer	Yield	Coupon	Mty	Price	Dealer	Yield
MBS										
AGCY	3mo	09/17	0.1775/1725	2-6	0.180/175	3.250	516	99-122/13	8- 8	3.350/346
IRS	6mo	12/17	0.3325/3225	7-3	0.338/327	0.00	W616	3.3890/3820	6- 3	3.389/382
CORP	1yr	06/03	0.4525							
CONV			0.875	411	99-17					
CDS			0.875	511	99-15					
CP			0.00	W611	1.207					
ADN			2 Yr	Roll	-7.0					
REPO										
Europe			1.375	312	99-15					
EUGV			1.375	412	99-09					
COVRD			1.375	512	99-02					
SUPRA			1.875	612	100-11					
IRS										
EUCR			1.875	414	96-08					
CDS			2.250	514	97-27					
ECP			0.00	W614	2.759					
DEPO			5 Yr	Roll	-4.6					
Canada										
CAN GVT										
PROV										

Interest rate swaps

Instrument	Term	Dir	Pay-Rcv	Day	Chg	Term	Price	Yield	Dir	Pay-Rcv	Semi	Bond	Day	Chg
CORP	1Y (AM)		0.750-770		-1.0									
CONV	2Y		1.325-335		-0.8	2Y 100-10+/11	0.953	37.25	38.25	1.326-336				-1.75
CDS	3Y		1.930-940		-1.5	3Y 101-07 /076	1.446	48.50	49.50	1.931-941				-0.75
CP	4Y		2.426-436		-0.6	4Y	1.918	50.75	51.75	2.425-436				-0.25
ADN	5Y		2.800-810		+0.8	5Y 101-03 /032	2.390	41.00	42.00	2.800-810				+0.25
REPO	6Y		3.083-093		-0.7	6Y	2.753	33.00	34.00	3.083-093				+0.00
Europe	7Y		3.298-308		-0.8	7Y 100-26 /27	3.117	18.25	19.25	3.300-310				+0.25
EUGV	8Y		3.460-470		-1.0	8Y	3.245	21.75	22.75	3.463-473				+0.00
COVRD	9Y		3.590-600		-0.8	9Y	3.374	21.50	22.50	3.589-599				-0.75
SUPRA	10Y		3.693-703		-1.0	10Y 96-27+/28	3.503	19.00	20.00	3.693-703				-0.75
IRS	12Y		3.850-860		-1.1	12Y 96-27+/28	3.503	34.25	36.25	3.846-866				-0.75
EUCR	15Y		3.995-005		-1.1	15Y	3.714	28.25	29.25	3.997-007				-0.75
CDS	20Y		4.083-093		-1.3	20Y	3.925	15.50	16.50	4.080-090				-1.00
ECP	25Y		4.118-128		-1.6	25Y	4.136	-1.75	-0.75	4.118-128				-1.00
DEPO	30Y		4.150-160		-1.4	30Y 98-11+/13	4.347	-19.75	-18.75	4.149-159				-1.00
Canada	40Y		4.162-172		-1.7	40Y 98-11+/13	4.347	-19.00	-17.00	4.157-177				-1.75

Interest rate swaps

Trade Execution



1 Client views indicative prices and clicks on a contract

Composite Page



2 Client chooses dealers and sends trade ticket

Trading Ticket



3 Client selects best price (high-lighted) and executes trade

Negotiation Page

Digital Record-keeping



TW (BLOT) (taveria-Tradeweb) TradeWeb W7.30JS USDEMO1

myBESTX \$174,440
USDEMO1office

Trade Blotter

Product ALL Dealer ALL State ALL Filter ALL

Date 07/07/2009 State ALL Filter ALL Page 1 of 2

Src	Trd	Dir	B/S	State	Security-Description	Quantity	Price/Yield	Settle	T
CORP	TW	63 DLRZ	BUY End	T	3 1/4 06/30/16 7yr	18,900	100-296 / 3.10073	07/08/12:2	
CONV	TW	35 DLRZ	PAY End	IRS	USD 8Y vs 3M	25,000	3.44924	07/09/12:2	
CDS	TW	64 DLRZ	BUY End	T	3 1/8 05/15/19 10yr	7,300	96-302 / 3.49377	07/08/12:2	
CP	TW	12 DLRK	BUY Acc	T	3 1/4 06/30/16 7yr	10,900	100-206 / 3.10572	07/09/12:2	
ADN	TW	13 DLRX	PAY Acc	IRS	USD 8Y vs 3M	25,000	3.44449	07/09/12:2	
REPO	TW	13 DLRX	BUY Acc	T	3 1/8 05/15/19 10yr	7,300	96-286 / 3.49953	07/08/12:2	
Europe	TW	84 DLRW	BUY End	T	3 1/4 06/30/16 7yr	18,900	100-292 / 3.10322	07/08/12:2	
EUGV	TW	35 DLRW	PAY End	IRS	USD 8Y vs 3M	25,000	3.45090	07/09/12:2	
COVRD	TW	85 DLRW	BUY End	T	3 1/8 05/15/19 10yr	7,300	96-302 / 3.49377	07/08/12:2	
SUPRA	TW	33 DLRZ	RCV End	IRS	USD 10Y vs 3M LIBOR	50,000	3.6920	07/09/12:2	
IRS	TW	11 DLRX	RCV Acc	IRS	USD 10Y vs 3M LIBOR	50,000	3.6980	07/09/12:2	
EUCR	TW	33 DLRW	RCV End	IRS	USD 10Y vs 3M LIBOR	50,000	3.6640	07/09/12:2	
CDS	TW	32 DLRZ	RCV End	IRS	USD 5Y vs 3M LIBOR	100,000	2.7710	07/09/12:2	
ECP	TW	32 DLRZ	RCV Acc	IRS	USD 5Y vs 3M LIBOR	100,000	2.7930	07/09/12:2	
DEPO	TW	32 DLRW	RCV End	IRS	USD 5Y vs 3M LIBOR	100,000	2.7610	07/09/12:2	
Canada	TW	31 DLRZ	RCV Exp	IRS	USD 5Y vs 3M LIBOR	100,000	2.8140	07/09/11:4	
CAN GVT	TW	31 DLRZ	RCV Exp	IRS	USD 5Y vs 3M LIBOR	100,000	2.7920	07/09/11:4	
PROV	TW	31 DLRW	RCV Exp	IRS	USD 5Y vs 3M LIBOR	100,000	2.7820	07/09/11:4	
CREDIT									
CAMM									
Asia									
JGB									

Trades loaded.

Up ALL AXE Dn

User's Trade Blotter provides a permanent, downloadable record of all trades and trade inquiries by clients.

Audit Trail



TW (TRAN) (taveria-Tradeweb) TradeWeb W7.30JS USDEMO1

myBESTX \$174,440
USDEMO1.nice

Transaction History

State **Accepted** Trade Date 07/07/2009 Company Tradeweb
Dealer DLRX(LDN)/3 Effective 07/09/2009 Customer Theresa Aperia
AGCY Trade # 11 Time 12:25:05-12:25:16 EDT LogonID taveria Test Trade Yes
IRS Issue IRS USD 10Y vs 3M LIBOR

COVP **ALL**

CONV	12:25:05.930 Trade sent: Receive 50,000 @ 3.6840, Effective Date: 07/09/2009
CDS	07/09/2009
CP	- Term Date: 07/09/2019, Term Date Adj: 07/09/2019, Rolls On: 09
ADN	- Fx Rate Pmt Frequency: Semi Bond, Fx Rate Day Count Fraction: 30/360
REPO	- Fx Rate Bus Pay Conv: Accr Period = MODFOLLOW, Pmt Date = MODFOLLOW
Europe	- Fl Rate Pmt Frequency: Quarterly, Non Compounding
EUGV	COMP:3.6840
COVRD	12:25:05.998 Trade received by Dealer
SUPRA	12:25:14.029 Dealer quote: 50,000 @ 3.6980 Subject
IRS	12:25:14.242 Quote received by Customer: 50,000 @ 3.6980
EUCR	12:25:15.289 Quote update: 50,000 @ 3.6940 Subject
CDS	12:25:15.305 Trade busy, quote update not seen
ECP	12:25:15.399 Customer EXECUTES trade
DEPO	DLRW:50,000 @ 3.6860, DLRZ:50,000 @ 3.6920, DLRX:50,000 @ 3.6980
Canada	COMP:3.6850

CAN GVT **Detail** **Trade** **Book** **Recap** **Ln Up** **Ln Dn** **Pg Up** **Pg Dn**

PROV

Up **ALL** AXE Dn

User's Transaction History provides a second-by-second record of how the trade was executed and processed.