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Electronic Trading in OTC Markets: A Risk Management Windfall

PRMIA, Toronto

February 18, 2009

WHERE THE MARKET COMES TO TRADE

Agenda

- OTC Markets
- Electronic Trading
- Risk Management Opportunities
- Trade Life-Cycle
- Trade Record
- What Can I Do Today?

OTC Markets

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1. Market Structure
   - Principal-based trading
2. Opaque
   - Lack of information
   - Confidential interactions
   - Incomplete trade records
3. Dynamic
   - Volatile
   - Leveraged positions
   - Inconsistent liquidity
   - Correlated trading
4. Operational Challenges
   - Latency
   - Redundancy & Human Error
   - Backward-looking Risk Management processes
5. Malfeasance
   - Opportunity, means and motivation
   - Burden on Risk Managers to protect individuals from themselves

Electronic Trading

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- Paradigm shift impacts organizations at all levels:
  - Trading - Infrastructure
  - Governance - Resources
  - Operations - Strategy
- Globally adopted by multiple-asset groups:
  - Equities - Foreign Exchange
  - Fixed Income - Money Market
  - Futures & Options - Swaps
- Tangible Benefits:
  - Performance - Risk Management
  - Productivity - Compliance
  - Efficiency - Settlements

Risk Management Opportunities

- Crystallize trades at Point of Execution
- Contain the dealing environment
- Move processes forward into real-time
- Introduce Post-trade Review

Trade Life-Cycle

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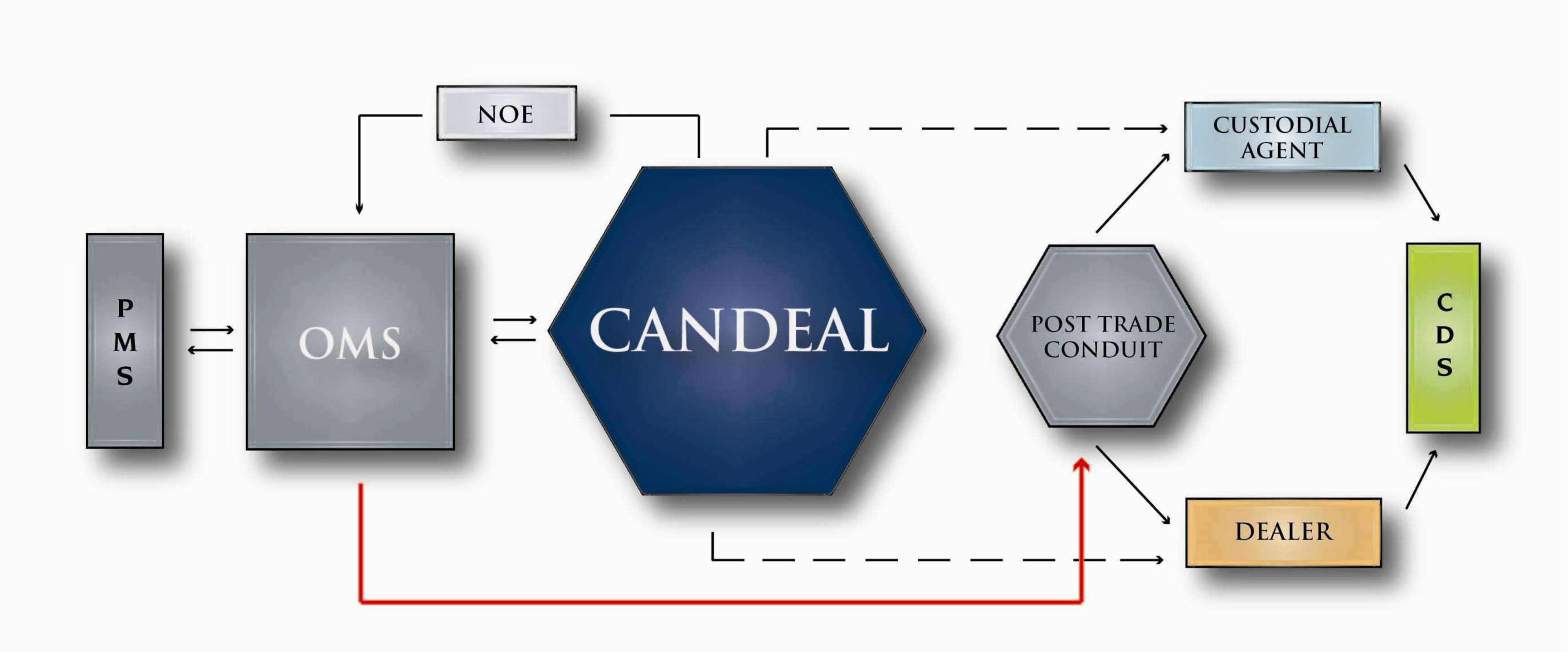

Price Discovery

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- Composite Price Screen
  - Aggregates mark-to-market prices
  - Validated by institutional trades
- Commingled Offering Page
  - Displays dealer offering levels
- Weighted Average Yield Page
  - Calculated from dealer offerings
  - Sorted by Rating and Maturity

Composite Prices Screen

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Iss	Coupon	Mty	Price	Yield	Iss	Coupon	Mty	Price	Yield
CAN	4.250	D08	100.056-060	1.953-810	CAN	4.000	910	103.557-578	1.951-940
CMB	4.100	D08	100.115-124	2.223-089	CMB	3.550	910	102.076-103	2.373-358
CAN	11.500	309	102.658-687	1.855-755	CAN	8.750	010	112.323-391	1.967-933
CMB	3.550	309	100.475-486	2.035-000	CAN	2.750	D10	101.656-669	1.913-907
CAN	3.750	609	101.012-021	1.812-795	CAN	9.000	311	115.385-422	2.045-030
CAN	5.500	609	101.923-937	1.818-792	CMB	4.050	311	103.425-447	2.516-507
CAN	11.000	609	104.798-831	1.814-754	CAN	6.000	611	109.669-692	2.054-045
CAN	4.250	909	101.900-906	1.772-764	CAN	8.500	611	115.793-847	2.055-035
CMB	4.650	909	102.098-107	2.038-027	CAN	3.750	911	104.145-168	2.202-193
CAN	10.750	009	107.624-657	1.771-735	CMB	4.600	911	105.170-207	2.680-666
CAN	4.250	D09	102.447-456	1.834-825	CMB	3.950	D11	103.399-442	2.782-768
CAN	9.750	310	109.800-882	1.934-873	CAN	3.750	612	104.349-364	2.452-448
CMB	3.750	310	101.993-013	2.202-187	CAN	5.250	612	109.388-415	2.449-442
CAN	3.750	610	102.737-747	1.923-916	CMB	4.000	612	103.497-497	2.957-957
CAN	5.500	610	105.350-367	1.928-917	CMB	4.800	612	106.161-181	2.962-956
CAN	9.500	610	111.342-381	1.928-903	CMB	4.550	D12	105.540-566	3.086-080
2 yr			101.656-669	1.913-907	10 yr			105.903-946	3.515-510
5 yr			103.612-641	2.647-640	30 yr			115.278-369	4.088-083

WHERE THE MARKET COMES TO TRADE

Commingled Offerings

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Composite Rates Screen

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Rating	Maturity	Size	WAY	Prior WAY	WAY Diff	High	Low
	25 to 45	1,760.361	2.240	2.350	-0.110	2.720	2.000
R1H	46 to 79	1,358.000	2.220	2.350	-0.130	2.800	1.750
	80 to 105	1,424.000	2.230	2.380	-0.150	2.850	1.750
	106 to 199	308.000	2.170	2.370	-0.200	3.380	1.700
	200 to 366	150.000	2.400	2.330	0.070	2.450	2.290
	1 to 7	5.000	2.430			2.430	2.430
	8 to 24	78.000	2.660	2.650	0.010	3.000	2.500
	25 to 45	139.000	2.790	2.480	0.310	3.250	2.480
R1M	46 to 79	156.000	2.830			3.300	2.530
	80 to 105	181.000	2.620			3.350	2.050
	106 to 199						
	200 to 366						
	1 to 7	27.000	2.920			3.100	2.700
	8 to 24	142.000	2.640	3.000	-0.360	3.050	2.500
	25 to 45	71.000	2.880	2.870	0.010	3.100	2.700
R1L	46 to 79	128.000	2.780	2.750	0.030	2.950	2.650

Trade Execution

1. Request For Quote (RFQ) Model
   - Live multi-dealer auction
   - Simultaneous not sequential
   - Suitable for liquid securities

2. Inventory-based Model
   - Commingled display of dealer offerings
   - Negotiate one-on-one with dealer
   - Suitable for off-the-run instruments

Trade Ticket

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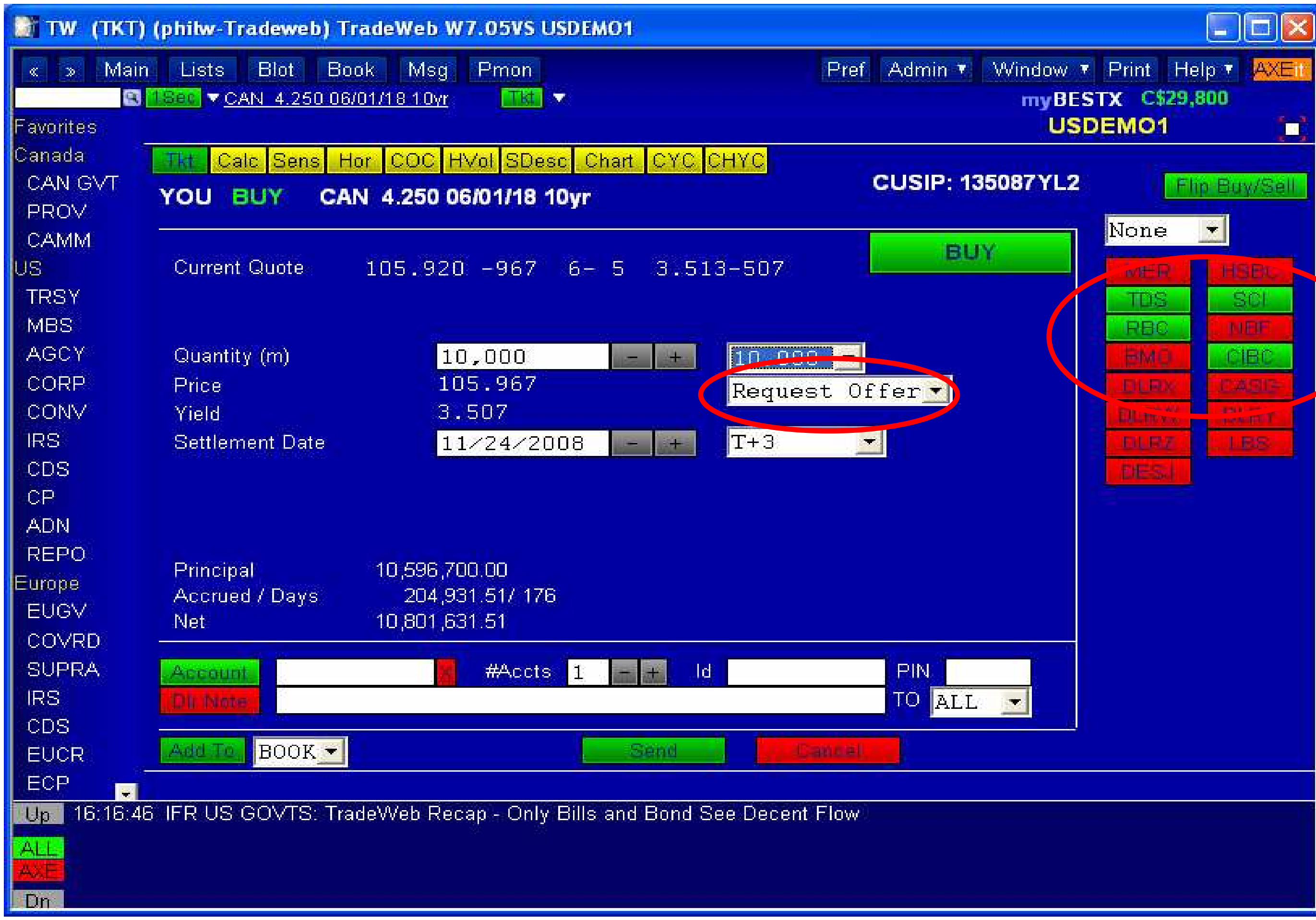

WHERE THE MARKET COMES TO TRADE

LIVE Dealing Screen

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Trade Record

- Electronic Trade Blotter – for any date
- Transaction Detail – all you need
- Transaction RECAP – trade snap-shot
- Transaction History – trade time-line
- Transaction Summary - online report

Trade Blotter

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Trade Detail

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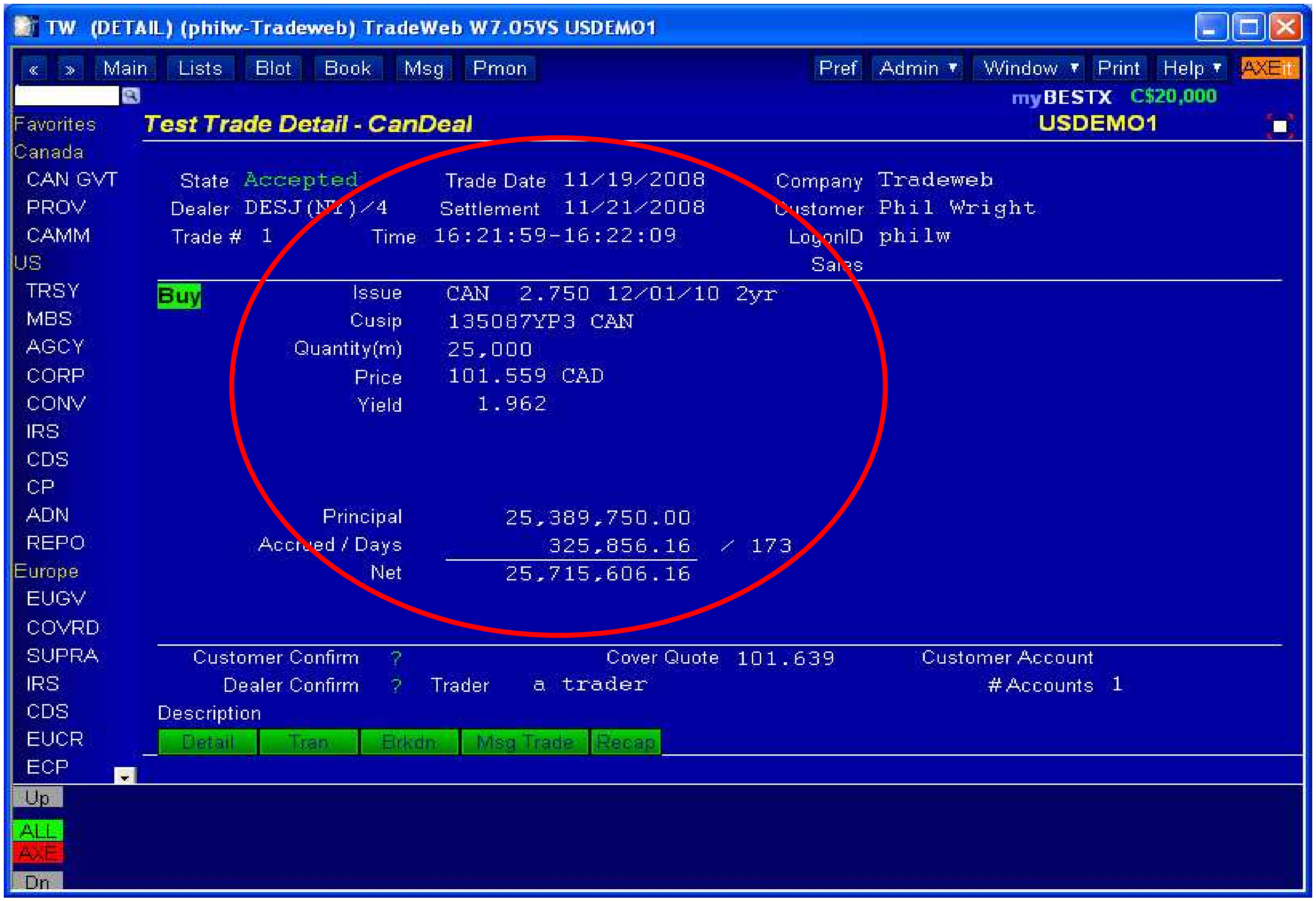

Transaction RECAP

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Transaction History

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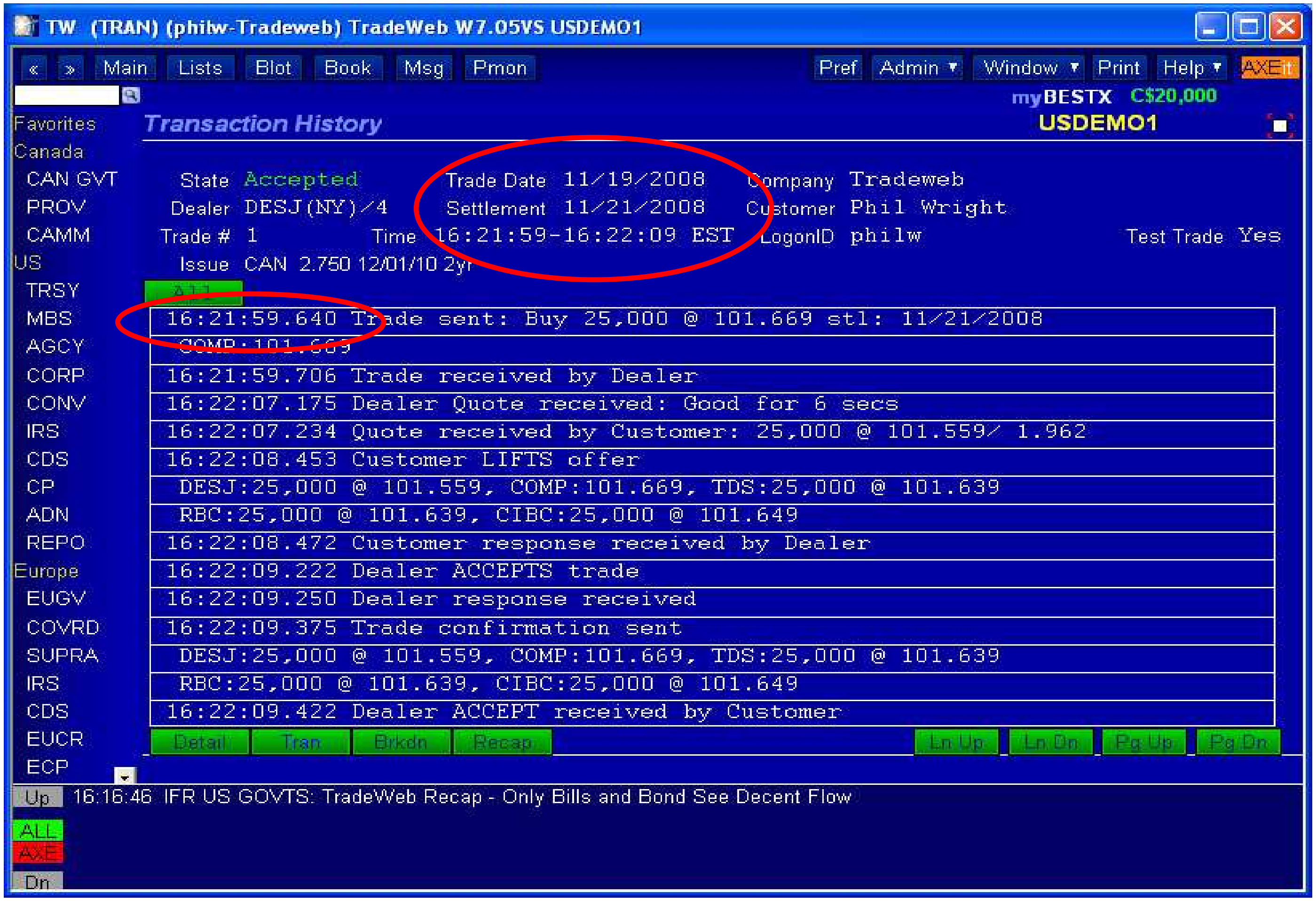

Transaction Summary

What Can I Do Today?

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1. Crystallize trades in a Trade Record
2. Develop a policy for e-Trading
3. Integrate Systems Infrastructure
4. Introduce a Trade Review process