

## Research & Product Development

June 26, 2009

## **Equity Index Futures Quarterly Roll Summary**\*

When compared with the March/June roll, the June/September roll took place in a much less turbulent market. The pricing of the roll returned to decidedly more familiar ranges for most of the contracts. The table in Exhibit 1 provides the daily averages for the U.S. domestic equity index futures. Exhibit 2 shows an intra-day graph of the E-mini S&P 500 futures roll pricing in relation to June and July 2009 Eurodollar futures rates. The spot S&P 500 Index is included to provide context for market direction.

As with the previous roll period, the implied financing showed a shrinking discount to forward LIBOR for the first week of the roll. Indeed, in the market's fourth consecutive month of run-up, the implied financing kept going up. As of June 11, the daily average for the E-mini S&P 500 roll climbed to within 6 basis points of LIBOR, up from a nearly 30 basis point discount to LIBOR at the beginning of the week. The same phenomenon appeared consistently across all the index futures.

With the market peaking on June 11, however, the implied financing rate turned around and continued to "cheapen" for the rest of the roll, following the retrenchment of the market. By the end of the period, the discount to LIBOR had returned to the level seen at the beginning of the period.

Exhibit 1

Volume Weighted Average Price (VWAP) and the corresponding volume weighted average implied financing rate of June-September calendar spreads in various equity index futures. Forward LIBOR was constructed using a combination of BBA LIBOR and Eurodollar Futures prices.

	S&P 500 VWAP		S&P 500 Impl. Fin.	E-mini NASDAQ-100		E-mini Dow (\$5)		E-mini S&P MidCap 400		E-mini S&P SmallCap 600		Forward
Date	Regular	E-mini	E-mini	VWAP	Impl. Fin.	VWAP	Impl. Fin.	VWAP	Impl. Fin.	VWAP	Impl. Fin.	LIBOR
6/8	-4.29	-4.30	0.438	-0.99	0.425	-55.8	0.394	-2.09	0.247	-1.05	-0.240	0.707
6/9	-4.18	-4.16	0.489	-1.17	0.371	-55.6	0.396	-1.76	0.463	n/a	n/a	0.667
6/10	-4.08	-4.09	0.523	-1.20	0.365	-52.5	0.538	-1.91	0.367	-1.03	-0.202	0.660
6/11	-3.94	-3.93	0.588	-1.01	0.413	-52.6	0.634	-1.81	0.423	-0.85	0.047	0.648
6/12	-4.01	-4.01	0.562	-1.05	0.407	-52.3	0.650	-2.00	0.307	n/a	n/a	0.633
6/15	-4.09	-4.11	0.528	-1.28	0.353	-54.9	0.540	-2.01	0.302	-0.87	0.018	0.628
6/16	-4.21	-4.22	0.483	-1.37	0.326	-55.7	0.507	-2.01	0.306	-1.00	-0.193	0.627
6/17	-4.26	-4.28	0.462	-1.36	0.331	-56.1	0.493	-1.91	0.386	-0.90	-0.037	0.626
6/18	-4.43	-4.44	0.390	-1.46	0.303	-56.3	0.478	-1.92	0.376	-0.98	-0.156	0.617

<sup>\*</sup> Written by Richard Co, Research & Product Development, CME Group. You can contact the author at <a href="mailto:richard.co@cmegroup.com">richard.co@cmegroup.com</a> or 312-930-3227.

**Exhibit 2**Intra-day roll pricing of E-mini S&P 500 futures relative to June and July 2009 Eurodollar futures (left axis). The Spot S&P 500 Index also is shown as the shaded area (right axis).

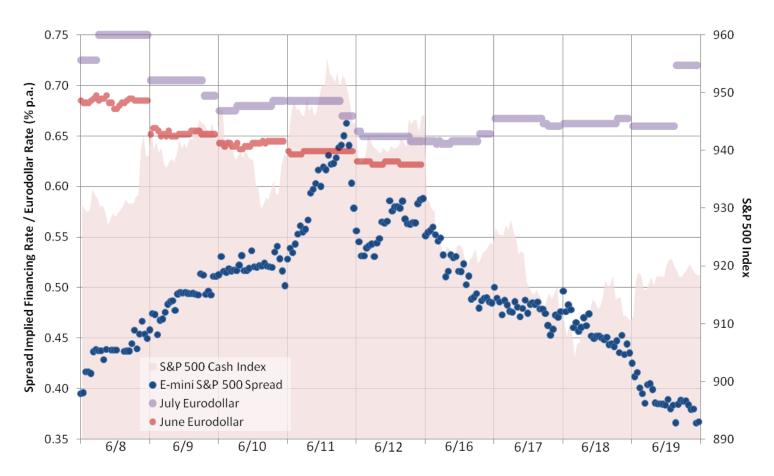


Exhibit 3 shows the daily summary for the roll of the two MSCI international equity index futures contracts. They tell a slightly different story than that of the domestic U.S. indexes. Both of the contracts rolled at implied rates above LIBOR. However, the rates declined in the first week of the roll. In the E-mini MSCI EAFE futures, the bulk of the volume was executed between 6/11 and 6/16. In those four trading days, the rolls were approximate 25- 35 basis points above LIBOR. A similar picture emerged in the E-mini MSCI Emerging Market futures, albeit at a higher rate than in the E-mini MSCI EAFE roll.

**Exhibit 3**Estimated roll costs for E-mini MSCI EAFE and E-mini MSCI Emerging Market Index futures.

	Е	-mini MSCI EAI	FE		Forward		
	VWAP	Impl. Fin.	Volume	VWAP	Impl. Fin.	Volume	LIBOR
6/8	n/a	n/a	0	-1.95	2.285	35	0.707
6/9	-2.44	1.362	84	n/a	n/a	0	0.667
6/10	-3.53	1.035	1109	-2.60	1.946	50	0.660
6/11	-4.04	0.877	2454	-3.56	1.448	514	0.648
6/12	-3.61	0.970	8252	-3.68	1.388	1031	0.633
6/15	-4.02	0.865	9305	-3.58	1.494	3507	0.628
6/16	-2.25	1.420	2478	-1.36	2.711	3826	0.627
6/17	-3.63	1.007	777	-0.74	3.117	808	0.626
6/18	-4.85	0.624	225	-0.30	3.353	1199	0.617

As with previous rolls, as the remaining unrolled expiring positions dwindled, the pricing of the roll became very volatile. The last three days of the roll in E-mini MSCI EAFE contract fluctuated within an 80+ basis point range. The E-mini MSCI Emerging Market Index roll "richened" to 200+ basis points above LIBOR at the end of the roll period. The phenomenon continues to underscore the need of market participants to monitor the pace of the roll and make necessary adjustments to their trading strategies.

The roll activity that took place via block trades continued to shrink, however, and was largely insignificant in this roll. The pricing of the blocks were in line with the prevailing markets of the time. Insofar as the open interest levels go, both E-mini MSCI futures contracts regressed slightly following the rollover. The new lead month E-mini MSCI EAFE index futures emerged from the rollover with 26,397 contracts in open interest, down from 28,792 and 28,123 contracts, respectively, in the last two quarterly roll periods. Open positions in the E-mini MSCI Emerging Markets futures declined to 12,599 contracts, down from 14,032 and 12,782 contracts in the last two quarterly rolls.

For more information on our suite of equity index futures and options, visit the CME Group web site at www.cmegroup.com/equities.

The E-mini Dow (\$5) futures contracts are listed with, and subject to, the rules and regulations of CBOT. All other equity index futures mentioned in this piece are listed with, and subject to, the rules and regulations of CME.

## **Disclaimers**

Futures trading is not suitable for all investors, and involves the risk of loss. Futures are a leveraged investment, and because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for a futures position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles. And only a portion of those funds should be devoted to any one trade because they cannot expect to profit on every trade.

All references to options refer to options on futures.

CME Group is a trademark of CME Group Inc. The Globe logo, CME and Chicago Mercantile Exchange are trademarks of Chicago Mercantile Exchange Inc. Chicago Board of Trade is a trademark of the Board of Trade of the City of Chicago, Inc. NYMEX is a trademark of the New York Mercantile Exchange, Inc.

"Standard & Poor's," "S&P®", "S&P 500®", "S&P SmallCap 600<sup>TM</sup>"and "S&P MidCap 400<sup>TM</sup>"are trademarks of The McGraw-Hill Companies, Inc. These products are not sponsored, sold or endorsed by S&P, a division of The McGraw-Hill Companies, Inc., and S&P makes no representation regarding the advisability of investing in them.

NASDAQ-100<sup>®</sup> is a registered service/trademark of The Nasdaq Stock Market, Inc. ("Corporations"). The Corporations and Nasdaq Financial Products Services, Inc. make no warranty, express or implied, and bear no liability with respect to the NASDAQ-100 Index, its use or any data included therein.

"Dow Jones Industrial Average" is a service mark of Dow Jones & Company and have been licensed for use for certain purposes by the Board of Trade of the city of Chicago (CBOT). The CBOT 's futures and futures-options based on the Dow Jones Industrial Average are not sponsored, endorsed, sold or promoted by Dow Jones, and Dow Jones makes no representation regarding the advisability of trading in such products. All other trademarks are property of their respective owners.

MSCI<sup>®</sup> and EAFE<sup>®</sup> are trademarks of MSCI Inc. or its affiliates and have been licensed for use by Chicago Mercantile Exchange Inc. Futures contracts and options contracts on any MSCI Index ("Index Contracts") are not sponsored, guaranteed or endorsed by MSCI, its affiliates or any other party involved in, or related to, making or compiling such MSCI index. Neither MSCI, its affiliates nor any other party involved in, or related to, making or compiling any MSCI index makes any representations regarding the advisability of investing in such Index Contracts. Neither MSCI, its affiliates nor any other party involved in, or related to, making or compiling any MSCI index makes any warranty, express or implied, or bears any liability as to the results to be obtained by any person or any entity from the use of any such MSCI index or any data included therein. No purchaser, seller or holder of an Index Contract, or any other person or entity, should use or refer to any MSCI trade name, trademark or service mark to sponsor, endorse, market or promote this security without first contacting MSCI to determine whether MSCI's permission is required.

The information within this brochure has been compiled by CME Group for general purposes only. CME Group assumes no responsibility for any errors or omissions. Additionally, all examples in this brochure are hypothetical situations, used for explanation purposes only, and should not be considered investment advice or the results of actual market experience All matters pertaining to rules and specifications herein are made subject to and are superseded by official CME, CBOT and NYMEX rules. Current rules should be consulted in all cases concerning contract specifications.

Copyright © 2009 CME Group. All rights reserved.