

Research & Product Development

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Equity Index Futures Quarterly Roll Summary — Q4 2010

As it turned out, the December-March roll transpired during the month-long rally in the equity market. While the “Euro crisis” continued to simmer, with the Irish situation coming to the forefront during the early part of the month, risk appetite appeared to have returned. Market volatility during the month dwindled.

Exhibit 1 summarizes roll spread pricing during the period for U.S. domestic stock indexes. The spreads traded increasingly higher during the roll period. In particular, E-mini S&P 500 calendar spreads traded from 0.36% per annum - 0.44% per annum in terms of implied financing at the conclusion of the roll period.

The implied financing rate is tied to the expected dividends for the ensuing three-month period, so if you maintain a higher dividend assumption, the implied financing rate would be higher as well. During December 2010, there have been a few announcements of constituents increasing dividend payouts. Furthermore, there had been increasing chatter about financial companies getting ready to increase their dividend payouts in 2011. Indeed, our source of dividend estimate had been increasing the forecasted dividends for the March quarter. As such, the implied financing rate increase may have partly reflected this expected increase in dividends throughout the period.

Exhibit 2 on the next page shows the history of the realized dividend points for S&P 500 corresponding to each expiration in the last 6 years. During this roll, the estimated dividends used in our implied financing calculation ranged from 6.17 to 6.24 index points. The increased dividend expectation from the 4th quarter of 2010 contributed to approximately 10 basis points of the implied financing rate.

Exhibit 1

Volume Weighted Average Price and the corresponding volume weighted average implied financing rate of Dec-Mar calendar spreads in various domestic index futures.

| Date | E-mini S&P 500 | | E-mini NASDAQ-100 | | E-mini Dow (\$5) | | E-mini S&P MidCap 400 | | E-mini S&P SmallCap 600 | |
|-------|----------------|------------|-------------------|------------|------------------|------------|-----------------------|------------|-------------------------|------------|
| | VWAP | Impl. Fin. | VWAP | Impl. Fin. | VWAP | Impl. Fin. | VWAP | Impl. Fin. | VWAP | Impl. Fin. |
| 12/6 | -5.09 | 0.36 | -1.72 | 0.29 | -65.73 | 0.32 | -2.29 | 0.28 | n/a | n/a |
| 12/7 | -5.05 | 0.37 | -1.68 | 0.29 | -65.34 | 0.34 | -2.26 | 0.29 | n/a | n/a |
| 12/8 | -5.01 | 0.38 | -1.55 | 0.32 | -63.48 | 0.40 | -2.20 | 0.32 | -1.05 | 0.08 |
| 12/9 | -5.02 | 0.37 | -1.51 | 0.32 | -63.03 | 0.41 | -2.15 | 0.34 | -0.85 | 0.27 |
| 12/10 | -4.98 | 0.40 | -1.36 | 0.35 | -64.07 | 0.39 | -2.19 | 0.32 | -0.86 | 0.26 |
| 12/13 | -4.98 | 0.40 | -1.18 | 0.38 | -62.85 | 0.43 | -2.17 | 0.33 | n/a | n/a |
| 12/14 | -4.99 | 0.40 | -1.17 | 0.38 | -63.18 | 0.41 | -2.17 | 0.33 | -0.8 | 0.31 |
| 12/15 | -4.93 | 0.42 | -0.98 | 0.42 | -62.42 | 0.44 | -2.07 | 0.38 | n/a | n/a |
| 12/16 | -4.87 | 0.44 | -0.91 | 0.43 | -61.68 | 0.46 | -1.88 | 0.46 | -0.83 | 0.28 |

Source: CME Group.

Exhibit 2

Historical Dividend Accruals, in index points, for the S&P 500 Index shown for each quarterly expiration over the last six years.

| Quarter | Year | | | | | |
|---------|------|------|------|------|------|------|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Mar | 5.64 | 6.41 | 7.11 | 7.11 | 6.70 | 5.65 |
| Jun | 5.12 | 5.72 | 6.34 | 7.02 | 5.36 | 5.56 |
| Sep | 5.51 | 6.09 | 7.31 | 7.14 | 5.33 | 5.67 |
| Dec | 5.81 | 6.51 | 7.55 | 6.43 | 5.42 | 5.83 |

Source: CME Group.

Turning to the MSCI contracts, as was customary for the E-mini MSCI EAFE contract, the bulk of the roll was condensed into a short period (December 10-15, 2010). Pricing appears to be high as well, with implied financing well above the levels exhibited in the previous quarter. E-mini MSCI Emerging Market index futures followed very similar lines, but with more dispersed rollover activities throughout the period. Pricing appears to be at the customary range of approximately 75 basis points above LIBOR, based on net dividend assumptions.

Exhibit 3

Estimated roll costs for the E-mini MSCI EAFE and E-mini MSCI Emerging Markets futures during the Dec 2010 /Mar 2011 roll period.

| | E-mini MSCI EAFE | | | | E-mini MSCI Emerging Markets | | | |
|-------|------------------|---------------------------|-------------------------|--------|------------------------------|------------|-------------------------|--------|
| | VWAP | Impl. Fin. (Gross Div) | Impl. Fin. (Net Div) | Volume | VWAP | Impl. Fin. | Impl. Fin. (Net Div) | Volume |
| 12/6 | n/a | n/a | n/a | n/a | 0.30 | 1.33 | 1.15 | 3 |
| 12/7 | n/a | n/a | n/a | n/a | 0.02 | 1.24 | 1.06 | 1734 |
| 12/8 | n/a | n/a | n/a | n/a | -0.08 | 1.07 | 0.90 | 661 |
| 12/9 | -3.98 | 1.13 | 0.81 | 1283 | -0.11 | 1.06 | 0.89 | 5976 |
| 12/10 | -4.24 | 1.05 | 0.74 | 3630 | -0.01 | 1.11 | 0.94 | 9857 |
| 12/13 | -1.84 | 1.63 | 1.32 | 8791 | 0.00 | 1.22 | 1.03 | 6940 |
| 12/14 | -2.57 | 1.46 | 1.15 | 5864 | 0.00 | 1.23 | 1.05 | 7266 |
| 12/15 | -4.56 | 0.99 | 0.67 | 5041 | -0.29 | 1.15 | 0.96 | 1917 |
| 12/16 | -3.88 | 1.15 | 0.83 | 164 | -0.76 | 1.02 | 0.83 | 2026 |

Source: CME Group.

As open interest levels go, E-mini MSCI EAFE futures declined slightly to 27,958 positions from 30,223 and 34,041 positions, respectively, following the last two expirations. E-mini MSCI Emerging Markets futures' open positions continued to build. The contract emerged from the rollover with 38,297 contracts of open interest, up from 28,146 and 24,839 positions following the last two expirations.

For more information about the CME Group suite of equity index futures and options, visit www.cmegroup.com/equities

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