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Abstract

This paper investigates the intra-day price dynamics of the S&P 500, Nasdaq-100 and DJIA indices for the periods both before and after the Nasdaq market crash which occurred between March 2000 and March 2001. We explore the relative price efficiencies of the three indices in the spot, futures, E-mini futures and ETF markets, and find that a cointegrating relationship existed between the three indices during the period after the crash. This would seem to imply that in the aftermath of the crash, the three indices shared common macroeconomic fundamentals.

We find that where there is some disturbance in the equilibrium relationship between the indices, the market which adjusts to retain equilibrium is the Nasdaq-100 market. In the long run, the S&P 500 index leads the other index contracts, a finding which is consistent with the trading cost hypothesis. Nevertheless, the Nasdaq-100 index retains short-run price leadership over both the S&P 500 and DJIA indices.

Keywords: ETF · E-mini · Nasdaq crash · price discovery