

# Steven Jordan's Publication and Working Paper Summaries

## PUBLICATIONS

Option Bounds. (with Victor de la Pena and Rustam Ibragimov)  
*Journal of Applied Probability*, 41(A), April 2004.

We derive bounds for path dependent options utilizing information that is extractable utilizing common metrics. Our bounds are better than existing bounds even though we use no more information. Probably the most interesting and potentially useful result of this paper is our transformation of the multi-period stochastic binomial option-pricing problem into a bound on a one-period binomial model with a Poisson random variable. The binomial model can be stochastic in either mean or variance, but not both.

## WORKING PAPERS

Another Look at the International Evidence for Long-Term Reversals.

I reexamine the international long-term reversal evidence. Using a longer time horizon and expanding the number of country indices, I provide evidence that long-term reversal results differ across methodology, starting dates, and the length of the time horizon. The strategy is risky, with many years producing negative profits. More importantly, the long-term contrarian profits do not exist when transaction costs are considered.

Will institutional investors always drive prices to fundamental value? (with Wentworth Boynton)

We study momentum, the strategy of buying past winners and selling short past losers. Past tests assume that the proceeds from short sales of losers fund the purchases of winners. In practice, the proceeds from short sales must remain as collateral to secure the short sale, and the investor must fund long positions with new capital or borrow. The inability to zero-investment finance implies special frictions. We evaluate momentum on larger capitalization stocks where trade-execution and trade-impact costs are lower and where we can be sure that we can short past losers. Although winner less loser returns are large, we also find substantial trade-execution costs, borrowing costs required to fund long positions, and costs associated with the probability of an adverse return that triggers a new infusion of capital. Net of these effects, momentum returns are too low to draw smart investors into trades. In addition, Congress deregulated trading commissions on May 1, 1975. Deregulation reduced costs for large stock trades for institutions but had little, if any, effect on smaller capitalization stocks. In the most recent period, large-stock momentum falls. The fall is most dramatic for winners and is consistent with transaction costs limiting price discovery in early periods. The results suggest that smart investors take positions to drive prices toward, but not necessarily fully to, fundamental value.

Is Foreign Money Hot? (with Xiaotong Wang)

With the advent of the Asian financial crash, a pressing debate as ensued concerning the benefits and/or dangers of allowing foreign investors into emerging markets. The market deregulation camp claims that the benefits of added liquidity, information flows, and risk sharing are far outweighed by any possible added volatility. The market regulation camp contends that foreign investors can be significant in size when compared to small emerging market values. Assuming these foreign speculators have short term horizons, it follows that allowing foreign investors can thus pump up prices leading to a crash when the economic conditions turn down and foreign funds pull out in mass. The fact remains though that the available data is poor. To date there is no pure comparison of stocks with identical conditions except for the sole difference of foreign investor presence or absence. We construct such a pseudo market using a unique data set available from Standard and Poor's Emerging Market Database. Controlling for known risk factors such as size and book-to-market, we are able to identify stocks as either investible (foreign ownership is allowed) or noninvestible. Our results support the market deregulation view and find that markets are efficient. Prices lead foreign fund flows, not vice versa. Foreign funds enhance market efficiency. We conclude that bad market policy is more severely punished and good market policy is more richly rewarded. Thus, it is the political and regulatory environment that determines the final effect of allowing foreign investors into an emerging market. Foreign funds may increase volatility, but this is not in itself bad for the market.