



# ARBITRAGE

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## Limited Arbitrage in Equity Markets

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This paper examines impediments to arbitrage in equity markets using a sample of 82 situations between 1985 and 2000, where the market value of a company is less than that of its ownership stake in a publicly traded subsidiary.

These situations, commonly referred to as “negative stub values,” suggest clear arbitrage opportunities. But they often persist, and therefore provide an interesting setting in which to study the risks and market frictions that prevent arbitrageurs from quickly forcing prices to fundamental values.

The empirical results provide considerable support for the argument that there are costs that limit arbitrage in equity markets. We show that negative stub values are not risk-free arbitrage opportunities. We also find that there is substantial variability in the time to termination, even for negative-stub-value investments that eventually converge.

The biggest friction impeding arbitrage appears to be the costs associated with imperfect information. In addition, imperfect information and transaction costs may encourage at least some specialization of arbitrageurs, which limits the effectiveness of diversification.

For 30% of the sample, the link between the parent and its subsidiary is severed before the relative value discrepancy is corrected. Furthermore, returns to a specialized arbitrageur would be 50% larger if the path to convergence was smooth rather than as observed. Uncertainty about the distribution of returns and characteristics of the risks limits arbitrage.

Market forces are working hard to keep prices at fundamental values, but the effectiveness of these efforts is sometimes limited.

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