

[DOI: 10.20472/IAC.2016.027.012](https://doi.org/10.20472/IAC.2016.027.012)

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CAPTURING THE ELUSIVE CONVEXITY OF THE RELATIONSHIP BETWEEN ACQUIRER'S ANNOUNCEMENT RETURNS AND THE CASH PORTI

Abstract:

We find empirical evidence that the acquirer's announcement return is a U-shaped function of the cash portion of the payment in mergers and acquisitions (M&As), *ceteris paribus*. The convexity of this function has long been theoretically predicted in an asymmetric information model, but it remained elusive in empirical investigations. We argue that this elusiveness might have been due to insufficient statistical power of the univariate methods applied to test the convexity hypothesis.

We study a sample of U.S. M&As from 1990 to 2008. We apply a structural M&A event study methodology that accounts for the interaction of two M&A effects: synergy (change in total value) and dominance (distribution of synergies between the parties). This interaction simultaneously determines the parties' announcement returns. In addition, we consider that the cash portion is an endogenous variable, as well (as the use of a mix of cash and stock as payment can be a form of risk sharing arrangement in two-sided asymmetric information model). Empirically modeling these interdependencies is the likely source of the extra statistical power that allows us to capture the convexity effect.

We discuss the U-shaped function in terms of an interplay between two commonly cited motives for the use of different methods of payments: capital gains tax deferral and asymmetric information. All in all, we estimate the acquirer's announcement return is the lowest when the payment consists of approximately 50 percent of cash.

Keywords:

event study, mergers & acquisitions, convexity

JEL Classification: G14, G34