

Dissertation Abstract

Essays on Information Transmission in Financial Markets

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My dissertation extends to two broad areas of finance, Corporate Finance and Asset Pricing, with theoretical grounds in Microeconomics. Its focus is on *information transmission and processing in financial markets*, and *portfolio implications* derived from this analysis.

In my paper, entitled *Interlocking Directors and Target Selection in Mergers and Acquisitions*, I analyze the role of interlocking directors in resolving the problems that arise from information asymmetry between the parties involved in M&As. Interlocking directors are directors that sit on the boards of both the target and the acquirer at the time of the deal announcement. Due to their position, these directors are privy to important information on both firms, and therefore, stand as a distinguished channel of *private information transmission*. This is a central feature in the model I develop.

To motivate my empirical tests, I develop a simple *model of target selection within an information asymmetry context*. In this model, the acquirer receives private information on one of the targets. Empirically, this corresponds to acquirers obtaining target-specific information through interlocking directors. The model has two basic predictions that are testable. 1. *The firms that have an interlocking director with the acquirer are more likely to be selected as targets*. This prediction has strong empirical support; interlocking directors raise the likelihood of becoming a target by 12.18 percentage points. The effect is particularly strong for targets that experience poor past performance, that are small, that are risky, or that belong to a different industry; which are precisely the targets that invoke greater information asymmetry problems for the acquirer. Similarly, acquirers that have high financial leverage, or insufficient cash holdings, or limited liquidity are further biased towards interlocking targets. This is consistent with these acquirers' willingness to use stock as the payment method, which leads to information asymmetry problems that operates against targets. To the extent that the above cases are those where target or acquirer-specific information is more valuable, results indicate that *interlocking directors have a significant role in transmitting private information that is critical to target choice*.

Modeling target selection as a function of private information provides another prediction which is, perhaps, even more interesting. 2. *If the acquirer selects a non-interlocking firm in the*

presence of an interlocking potential target, this non-selected interlocking firm will under-perform its peers through time. The intuition is that this case occurs only when the private information of the acquirer corresponds to negative news on this target. By comparing the post-deal accounting performance of the non-selected interlocking firms with that of their peers, I find empirical support for their poor performance. I have also documented that the portfolio of non-selected interlocking firms under-perform a number of alternative portfolios.

In another paper with Prof. Marin, entitled *On the Economics of Hedge Fund Drawdown Status: Performance, Insurance Selling, and Darwinian Selection*, we analyze information transmission and processing in the world of hedge funds, with a focus on *drawdowns* (losses from the peak point of the investment). In a strong contradiction to simple intuition and industry performance evaluation trends, we find that *hedge funds that survive prolonged periods of large drawdowns are managed by truly talented managers who deliver outstanding performance.* We explain this phenomenon by the market's *Darwinian selection mechanism* where investors keep the funds managed by talented managers alive, and let the others die. The essence of Darwinian mechanism lies in two features: 1. Better *information transmission* from the fund managers to the investors, as these managers would be willing to disclose more on their investment philosophy to rationalize the large drawdown. Not doing so would probably result in the exit of investors and the death of the fund. 2. Better *information processing* of fund investors, as it is most worthwhile to analyze extra relevant information about the manager's investment philosophy after large drawdowns. The reason is the *high water mark clause* specific to the hedge fund world that prevents investors from paying fees until the fund returns to its peak investment point. Investors who stay in the fund would save a lot of fees, but this is reasonable only when the expected return of the fund is positive; that is, when the manager is talented. Consequently, an investment strategy that forms a portfolio of highest drawdown funds delivers a monthly risk-adjusted return of 1.23 percent.

On the contrary to the outstanding performance of the highest drawdown funds, we document the poor performance of the lowest drawdown funds in our paper. This is driven by the heavy presence of *insurance sellers* in low drawdown portfolios. These are funds managed by untalented traders who specialize in strategies akin to selling insurance, which share the property of delivering positive returns in normal times but have the hidden cost of large losses during crises periods. As a result, we find that *low drawdown funds are weak performers, in general, and bad performers in times of turmoil.*