

STARMINE MERGER AND ACQUISITION ARBITRAGE SPREAD OVERVIEW

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Abstract

The StarMine® Merger and Acquisition (M&A) Arbitrage Spread provides accurate arbitrage spreads over time and intelligently handles various forms of payment, company corporate actions, currency conversion and complex deal terms. The tool allows asset managers to track M&A deals' progress, gain insight into competitive positioning and advance their merger arbitrage strategies.

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1. Introduction

Merger arbitrage is an investment strategy that invests in securities involved in mergers and acquisitions (M&A). Once an M&A deal is announced, the arbitrageur assembles information on the deal and evaluates the risk of the transaction. Due to the uncertainty of the deal outcome, the stock of the company being acquired is generally traded at a discount to the per share offer value. Depending on the form of payment in an M&A transaction, the arbitrageur usually purchases the shares of the company being acquired and sells short the shares of the acquiring company. If the deal is successfully completed, the arbitrageur will make a profit by receiving the spread between their purchased price of the target company and the price at which the firm is merged. If the merger fails, the arbitrageur will usually incur a loss. Researchers such as Karolyi and Shannon (1999), Baker and Savasoglu (2002) and Jindra and Walking (2004) report significant excess returns related to the merger arbitrage strategy.

It is trivial to calculate the arbitrage spread for a simple cash-only domestic M&A deal. However, calculating arbitrage spreads for other types of M&A transactions is not always easy. For example, a mixed stock and cash merger, a cross-border merger that involves exchange rate considerations or a transaction with multiple share classes requires additional steps of computation.

The StarMine M&A Arbitrage Spread is designed to adjust for various transaction types and provides accurate arbitrage

spreads over time. The tool is developed based on Refinitiv's Merger & Acquisition data, which provides the global asset management and alternative investment management industries with comprehensive coverage of M&A activity worldwide.

The StarMine M&A Arbitrage Spread computes the end of day difference between the market price of the company being acquired and total offer price, whether the deal is with cash or stock-for-stock arrangements, or a combination of cash and securities. It takes corporate actions from both the target and the acquiring company into consideration and generates arbitrage spreads from 30 days prior to the merger announcement up to the completion or withdrawn date. The tool also handles complicated deal terms, such as collar agreements, which are added to protect either the acquiring or the target company. It allows asset managers to monitor a deal's risk over time, gain insight into competitive positioning and advance their arbitrage strategies.

The arbitrage spread tool covers transactions that are acquisitions of majority interest or remaining interest, or mergers, and that involve a public target company. It measures arbitrage spreads for M&A deals announced from 1994 and handles nearly 1,000 deals globally each year in the last three years. The tool provides arbitrage spreads in U.S. Dollar and percentage terms.

2. Examples

Below are two examples of how the StarMine M&A Arbitrage Spread provides arbitrage spreads.

Scenario 1: complex deal offers and currency conversion

On February 24, 2017, MacDonald, Dettwiler and Associates Ltd. (MDA) announced their intention to acquire DigitalGlobe for US\$17.50 per share in cash and 0.3132 shares of MDA in exchange for every common share of DigitalGlobe.

The StarMine M&A Arbitrage Spread converts MDA's closing share prices on the Toronto Stock Exchange (TSX) from Canadian

Dollar to U.S. Dollar, combines the value of the stock and cash offers and generates arbitrage gross spreads in U.S. Dollar. While the deal was pending, MDA announced to pay a cash dividend of CAD\$0.37 with an ex-dividend date of March 13, 2017. Thus, the arbitrage spread tool estimates the planned dividends that the arbitrageur's short position is going to cost and then subtracts these dividends in the calculation of final arbitrage spreads in U.S. Dollar and percentage.

Table 1 below displays the arbitrage spreads that the M&A Arbitrage Spread computes for three example dates when the deal is pending.

As of Date	DigitalGlobe Close Price (USD)	Offer Value (USD)	Gross Spread (USD)	Arbitrage Spread (USD)	Arbitrage Spread Percent (%)
February 27, 2017	31.50	32.97	1.47	1.38	4.38
February 28, 2017	31.65	32.97	1.32	1.23	3.90
March 1, 2017	31.90	33.30	1.40	1.32	4.13

Table 1. DigitalGlobe's trading price, MDA's offer value, and M&A arbitrage spreads on February 27, February 28 and March 1, 2017. The Gross Spreads represent the spreads between the offer values and the target's close prices. The Arbitrage Spreads subtract MDA's planned dividends from the Gross Spreads.

Scenario 2: deal evolution

In a long journey to acquire its rival, Monsanto, Bayer AG repeatedly sweetened its initial all-cash offer of US\$122 per share in 2016. In July 2016, Bayer lifted its takeover bid by \$3 a share to \$125 a share. The third revised offer of \$127.5 per share was made on September 6, 2016. Finally, Monsanto accepted the updated offer of \$128 a share on September 14.

The StarMine M&A Arbitrage Spread tracks the evolution of this transaction and provides the arbitrage spreads from 30 days prior to the deal announcement up to the completion date. Figure 1 below illustrates the trend of arbitrage spread related to this acquisition.

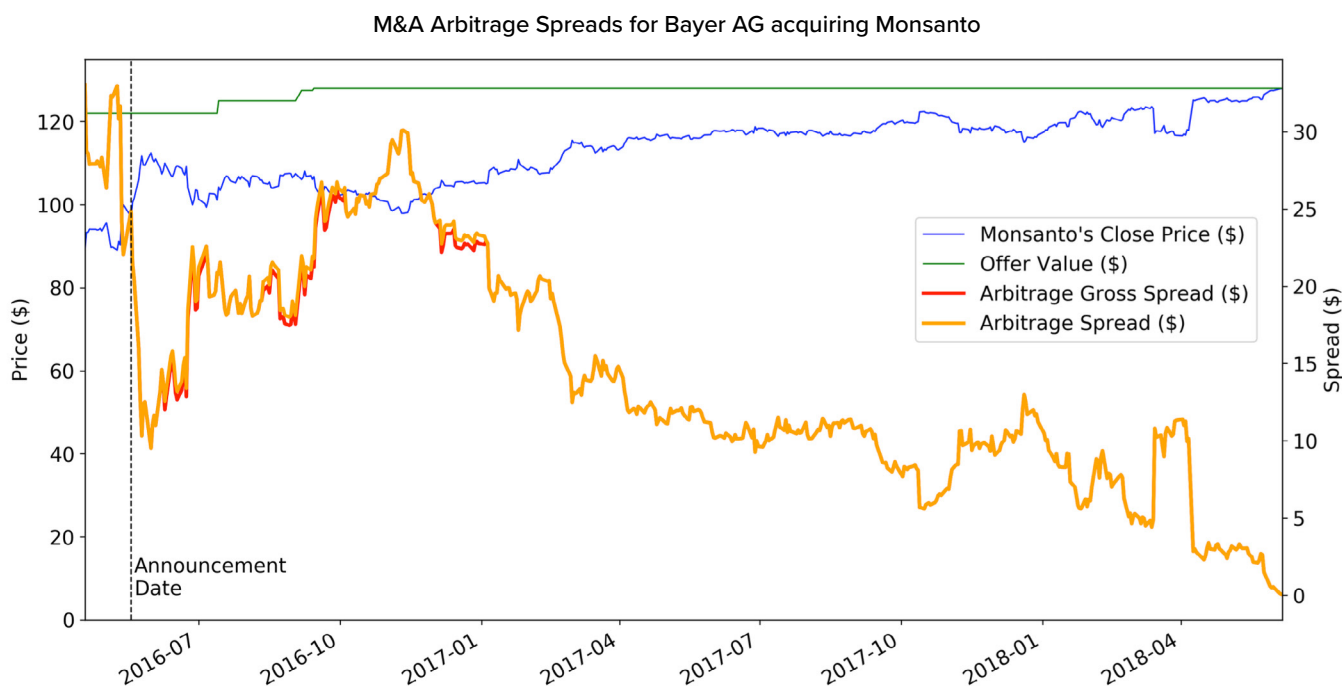


Figure 1. Monsanto's trading activity, Bayer AG's offer value and arbitrage spreads calculated by the StarMine M&A Arbitrage Spread between June 2016 and June 2018

3. References

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The StarMine M&A Arbitrage Spread will be available via Custom Datafeed Solutions. For more information, please contact your Refinitiv representative, or the Refinitiv Deals Team at dealsintelligence@refinitiv.com, or visit refinitiv.com/en/contact-sales or my.refinitiv.com/content/mytr/en/helpandsupport.html

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