The Arbitrage Funds

ADVISED BY WATER ISLAND CAPITAL

Merger Arbitrage, Demystified

Give a man a fish, and you feed him for a day.
Teach him how to arbitrage and you feed him forever.

– Warren Buffett

Merger arbitrage is an investment strategy that has been used by high-net-worth individuals and institutional investors for decades. While the strategy has become more accessible to individual investors, some may be wondering: What exactly is merger arbitrage, and what are its benefits?

Water Island Capital has been a specialist in merger arbitrage and event-driven investing for more than two decades. Herein, we provide a practical overview of merger arbitrage and how it may help investors seeking to diversify or reduce volatility in their portfolios.

What is merger arbitrage?

Merger arbitrage is an event-driven strategy that aims to profit by investing in companies involved in definitive, publicly announced mergers and acquisitions (M&A).

The profit opportunity in merger arbitrage is called a **deal spread**. When a merger is announced, the acquirer typically offers to pay a significant premium over the prevailing share price of the target company. In response, the target share price usually trades up on the news. At this point, many existing shareholders of the target – who normally own the stock as part of a traditional, fundamental strategy – may seek to exit their positions in order to realize their gains, rather than wait for the deal to close and risk seeing the share price retreat in case the deal fails.

This is where the merger arbitrageur steps in. While the target's shares are likely to trade up in price, they usually still trade at a discount to the purchase price. This discount – the difference between the price at which the target company in a transaction currently trades and the price the acquiring company has agreed to pay to complete the deal – is the deal spread.

The spread exists because there is a risk the transaction could fail or be delayed, and the arbitrageur demands some level of compensation in exchange for underwriting this risk and providing liquidity to those traditional fundamental shareholders who are seeking to exit their positions.

32%

Average premium, paid by acquirers, over target unaffected share prices

6%

Average gross deal spread one day following deal announcement

Source: FactSet.
Date range: 1/1/06-12/31/25.
Represents definitive, global M&A targeting public companies with deal values greater than $200 million.
Please see "Important Information" for disclosures at the end of this presentation.

DID YOU KNOW?

The term "arbitrage" simply means to take advantage of a price discrepancy. One of the first examples of modern arbitrage occurred during the era of Napoleon, when the Rothschild family bought and sold gold across Europe, profiting by exploiting price differences in different markets.

How merger arbitrage works...

Upon the announcement of a transaction, a merger arbitrageur will typically conduct deep dive fundamental analysis into the deal. Amongst myriad other factors, the arbitrageur must:

- **understand the fundamental valuation of the target and acquirer**, to determine if the acquirer paid too much (which risks its shareholders voting down the deal) or too little (which could open the door for a competing bid, or could risk the target shareholders voting against the deal);
- **assess the expected timeline** to completion to estimate annualized rates of return;
- **evaluate the competitive landscape** to gauge the likelihood of regulatory approvals or objections; and
- **ascertain the probability of successfully receiving financing**, if necessary.

If a deal is deemed to meet the arbitrageur's risk/reward criteria, in the strategy's purest form, the arbitrageur will purchase the shares of the target company and, if the acquiring company is using its stock as some or all of the payment for the transaction, the arbitrageur will also sell short shares of the acquirer.

Whether the structure of the deal payment is all cash, all stock, or some combination of the two, the arbitrageur's goal remains the same: to capture the deal spread.

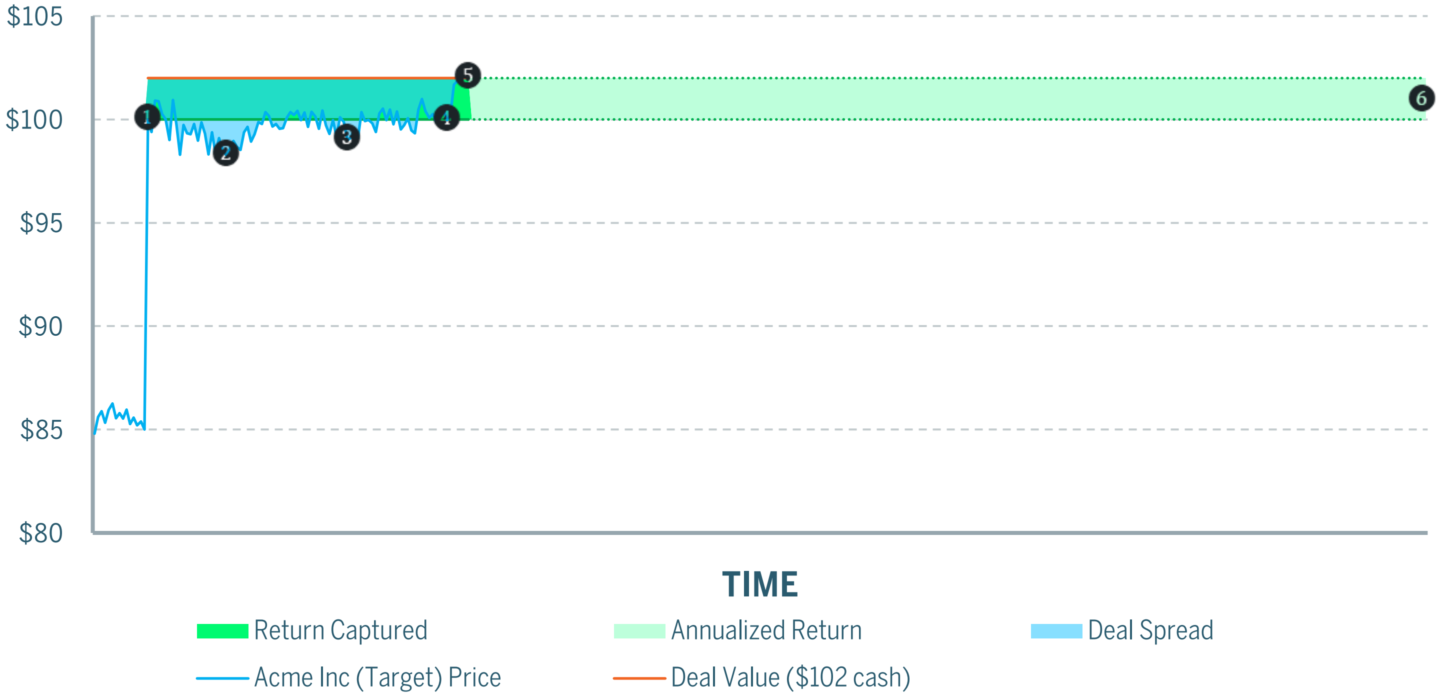
DID YOU KNOW?

Traditional short sellers typically sell a stock short because they are betting against the company, and they believe the share price will go down. Their goal is to buy the shares back later for a profit.

A merger arbitrageur, on the other hand, sells the stock of the acquirer short in order to lock in a specific rate of return (the spread). This is only necessary when the acquirer is using its stock as a form of payment. The number of shares that must be sold short is defined by the exchange ratio – a deal term which is outlined in every merger agreement, specifying the number of acquirer shares that will be exchanged for every target share.

After the deal closes and the arbitrageur receives acquirer shares, the resulting position will be collapsed against the existing short position. By purchasing shares in the target and selling short the appropriate amount of shares of the acquirer at approximately the same time, merger arbitrageurs can then calculate their expected profit in the event of successful deal completion, well ahead of the actual event.

Example of a Deal: All-Cash Acquisition



1. **Day 1: Wayne Enterprises announces it has reached an agreement to acquire Acme Incorporated for $102 in cash.** The day prior to announcement, Acme shares had been trading at $85, representing a premium of 20%. Upon the news, Acme shares trade up to $100.

   A merger arbitrage investor purchases Acme shares at $100, aiming to capture a spread of $2, or 2%.

   Spread = Deal Value – Target Price
   $102 – $100 = $2

   Percent Return = Spread ÷ Target Price
   $2 ÷ $100 = 2%

2. **Day 23:** Wayne Enterprises secures required financing.

3. **Day 57:** Acme Incorporated shareholders vote to approve the deal.

4. **Day 85:** The deal receives required regulatory approvals.

5. **Day 90: The deal closes successfully, and Acme shareholders receive $102 cash per share.**

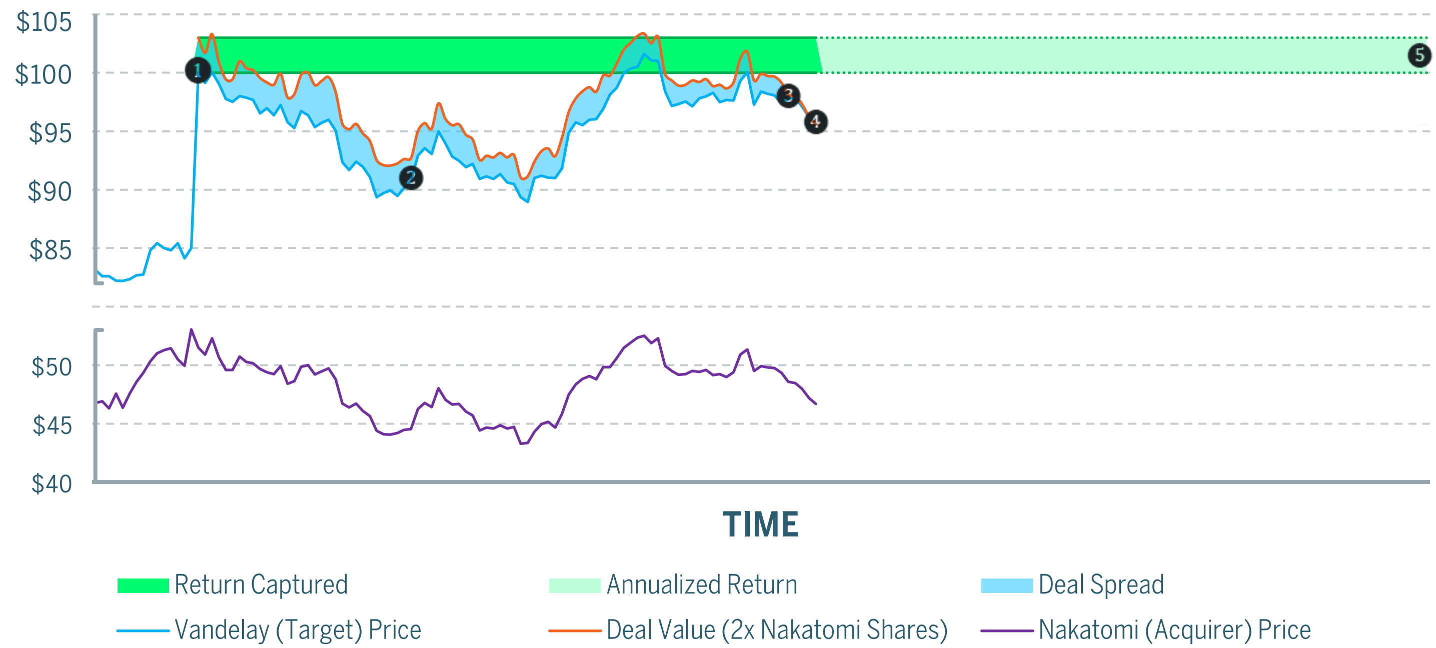
6. With a deal duration of approximately three months, the annualized rate of return comes to 8% (based on an annualization factor of 4x).

   Timing to Close = Days in Year ÷ Deal Duration
   12 Months ÷ 3 Months = 4

   Annualized Return = Percent Return × Time to Close
   2% × 4 = 8%

The events portrayed are theoretical. Wayne Enterprises and Acme Incorporated are fictitious companies. No similarity to actual events or companies is intended or should be inferred. Any similarity to actual events or companies is purely coincidental. Actual investments are subject to risk, including possible loss of principal. Please see "Important Information" for disclosures at the end of this presentation.

Example of a Deal: Stock-for-Stock Merger



1 **Day 1: Vandelay Industries announces it has reached an agreement to be acquired by Nakatomi Corporation in an all-stock deal. Per the terms of the transaction, Nakatomi will issue two shares of its stock in exchange for each share of Vandelay.** With Nakatomi trading at $51.50 on the day of announcement, the purchase price comes to $103 on day one of the deal timeline.

The arbitrageur purchases Vandelay shares at $100 and simultaneously sells short twice as many Nakatomi shares, aiming to lock in a spread of $3, or 3%.

Spread = Deal Value – Target Price
$103 – $100 = $3

Percent Return = Spread ÷ Target Price
$3 ÷ $100 = 3%

2 **Day 64:** Nakatomi Corporation and Vandelay Industries shareholders vote to approve the deal.

3 **Day 174:** The deal receives required regulatory approvals.

4 **Day 180: The deal closes successfully, and Vandelay shareholders receive two shares of Nakatomi for every share of Vandelay they own. The arbitrageur collapses the long and short Nakatomi positions against each other and realizes the profit opportunity that was locked in on day one.**

5 With a deal duration of approximately six months, the annualized rate of return comes to 6% (based on an annualization factor of 2x).

Timing to Close = Days in Year ÷ Deal Duration
12 Months ÷ 6 Months = 2

Annualized Return = Percent Return × Time to Close
3% × 2 = 6%

The events portrayed are theoretical. Nakatomi Corporation and Vandelay Industries are fictitious companies. No similarity to actual events or companies is intended or should be inferred. Any similarity to actual events or companies is purely coincidental. Actual investments are subject to risk, including possible loss of principal. Please see "Important Information" for disclosures at the end of this presentation.

Why is merger arbitrage effective?

1. **Mergers are always happening.**

   Corporations engage in M&A for many reasons, such as to reduce costs through greater efficiency, to gain scale through increased revenue or market share, to achieve faster growth, or to diversify their business by entering new markets or accessing new technologies. Mergers and acquisitions are one of the most common forms of corporate events, and they occur during all phases of the market cycle – up markets, down markets, and flat markets.

2. **The probability of a merger's successful completion is independent of broader market moves.**

   Once a transaction is announced, the shares of the target tend to trade not in line with the direction of stock or bond markets, but rather based on the progress of the deal. Since merger arbitrage profits from the successful completion of announced deals, the strategy has historically demonstrated an ability to generate absolute returns with low correlation and low beta to broader markets. Furthermore, merger arbitrage has exhibited low levels of volatility over time, with strong capital preservation characteristics.

HISTORICAL RISK METRICS – TRAILING 20 YEARS

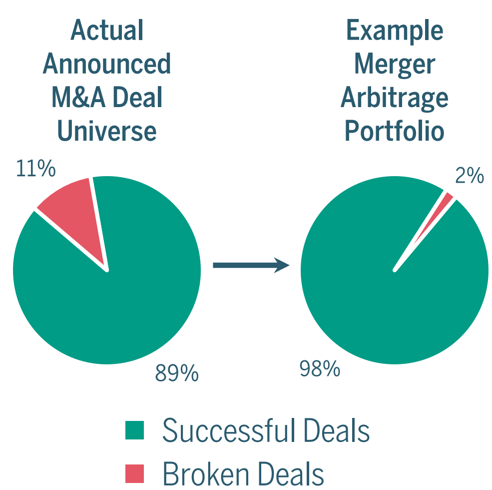
	VOLATILITY (%)	CORRELATION TO STOCKS	CORRELATION TO BONDS	BETA TO STOCKS	BETA TO BONDS
MERGER ARBITRAGE	4.2	0.6	0.1	0.2	0.1
BONDS	4.2	0.2	1.0	0.1	1.0
STOCKS	15.1	1.0	0.2	1.0	0.9

Date range: 1/1/06-12/31/25. Source: Morningstar. Past performance does not guarantee future results. "Merger Arbitrage" represented by HFRI Merger Arbitrage Index. "Stocks" represented by S&P 500 Index. "Bonds" represented by Bloomberg US Aggregate Bond Index. Indexes are unmanaged and one cannot invest directly in an index. Please refer to the Glossary at the end of this presentation for index definitions. Please see "Important Information" for disclosures at the end of this presentation.

DID YOU KNOW?

The terms and conditions of every M&A transaction are outlined in a legally binding contract called a **definitive merger agreement** (DMA). Once the DMA is signed, the parties to the deal are contractually obligated to complete the transaction, barring some extraordinary circumstance. In practice, only a select few developments can cause a deal to fall apart: failure to secure regulatory approval, failure to secure shareholder approval, failure to secure financing, or a material adverse change to a party – and on average **nearly nine in ten announced M&A deals successfully close**, according to FactSet data. The primary job of a merger arbitrage investor is to assess the risks in each transaction and eliminate from the universe those that are most likely to be terminated or withdrawn, and a skilled arbitrageur may be able to craft a portfolio where fewer than 2% of deals fail to complete.

A MERGER ARBITRAGEUR AIMS TO AVOID AS MANY FAILED DEALS AS POSSIBLE



"Actual Announced Deal Universe" represents global, definitive M&A transactions valued greater than $200 million with publicly traded targets, not involved in competitive bidding scenarios. Date range: 1/1/06-12/31/25. Source: FactSet.

There can be no guarantee that any manager will succeed in investing in fewer failed M&A transactions than the investible universe or that successfully doing so will improve returns.

What drives merger arbitrage returns?

The deal spread is the primary driver of merger arbitrage returns.

The magnitude of a spread is influenced by several factors, chiefly deal risk, timing to close, and the risk-free rate. In addition, deal flow and volatility form two other pillars of the strategy's return potential.

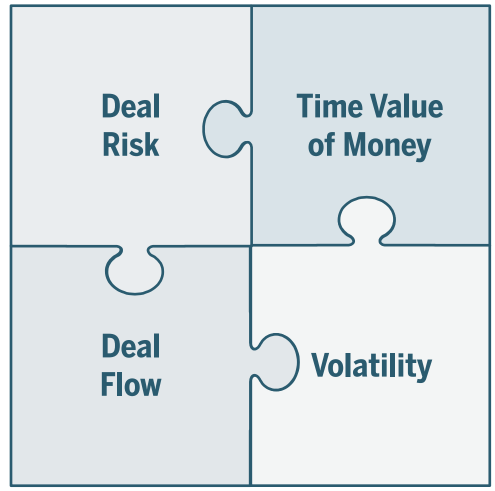
Deal risk is the risk that a transaction could fail to close successfully. The level of deal risk in each idiosyncratic M&A transaction is unique, and it varies based on the hurdles each deal must achieve to complete, such as regulatory approvals, shareholder votes, or financing. While an arbitrageur will typically seek to mitigate exposure to external risk factors, such as market risk or currency risk, the deal risk in a portfolio is desirable as it is elemental to merger arbitrage returns.

The risk-free rate, together with estimated timing to close, forms the **time value of money**. If a deal's spread does not exceed this baseline rate of return, the arbitrageur is unlikely to participate in the transaction, as it would not offer proper compensation for the risks inherent in the deal.

Ample levels of **deal flow** can benefit the strategy, as more deals provide more opportunity for arbitrageurs to put money to work, both allowing investors to be more selective and spreading the strategy's dollars across a broader opportunity set.

Volatility can be beneficial by providing attractive entry points and creating an ability to trade around positions opportunistically.

The Merger Arbitrage Spread: Components of a Rate of Return



Deal Risk

- Regulatory Approvals
- Shareholder Votes
- Financing
- Potential for Material Adverse Change
- Strength of Definitive Merger Agreement
- Risk of Interlopers

Time Value of Money

- Risk-Free Rate
- Timing to Close

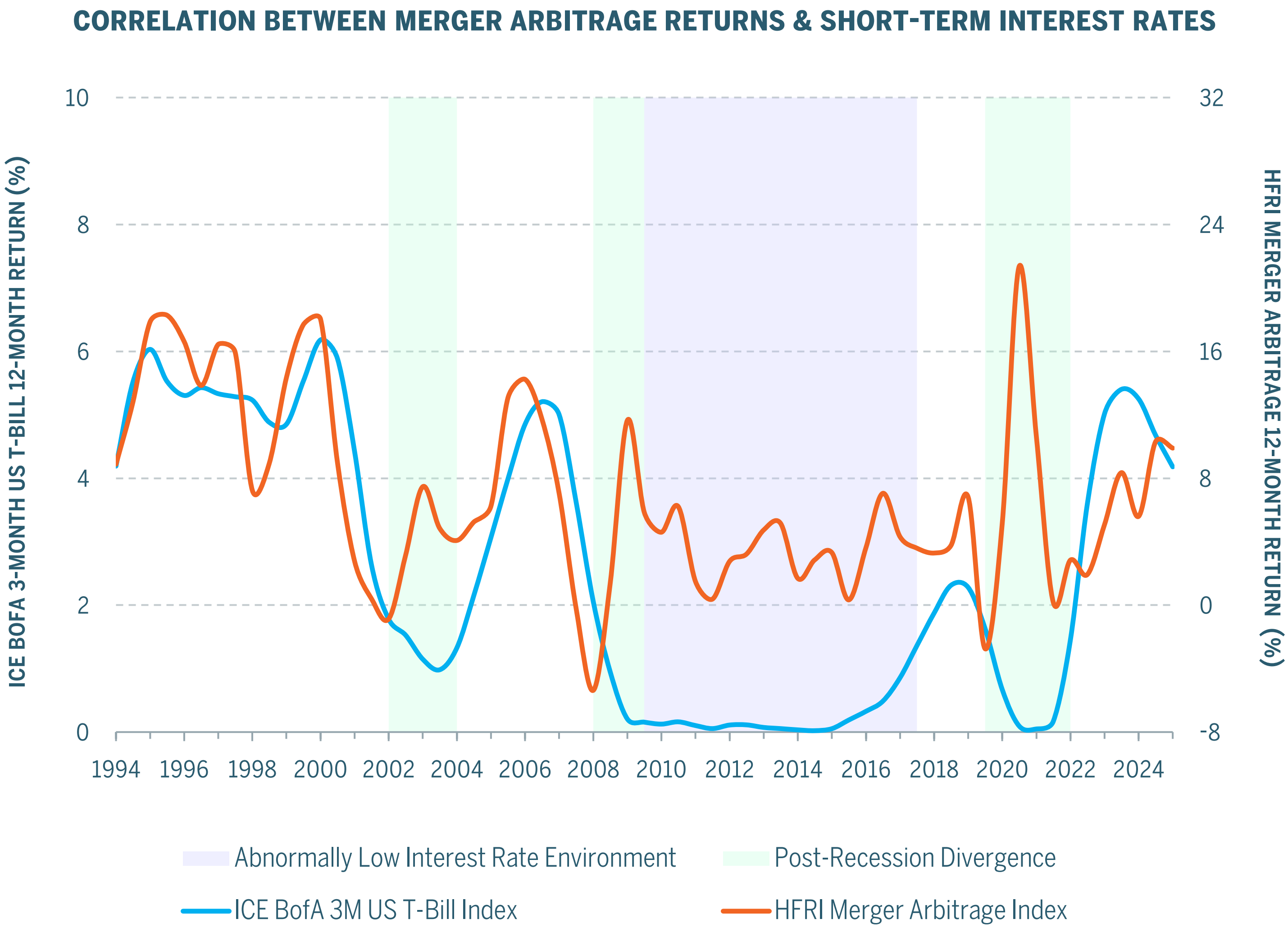
Deal Flow

- Opportunity Set
- Crowdedness

Volatility

- Forced or Panicked Selling
- Opportunistic Entry Points

Merger Arbitrage and Interest Rates



Since **the risk-free rate is a core component of deal spreads**, merger arbitrage has historically benefited from rising or elevated interest rates. Prior to the zero-interest-rate era following the Global Financial Crisis, short-term US Treasury Bills – a common proxy for the risk-free rate – and merger arbitrage rates of return displayed a strong correlation, with momentary periods of divergence following recessionary periods. While the relationship became disjointed during the abnormally low interest-rate environment, as rates returned to more normalized levels, the correlated relationship began to resume.

Date range: 12/31/94-12/31/25. Source: Morningstar. Past performance does not guarantee future results. Indexes are unmanaged and one cannot invest directly in an index. Please refer to the Glossary at the end of this presentation for index definitions. Please see "Important Information" for disclosures at the end of this presentation.

What are the risks in merger arbitrage?

The primary risk in any merger arbitrage investment is the risk that a deal will not close on time or at all.

When deal timelines get extended, even if a transaction closes at its original terms and is profitable for the arbitrageur, it can still lead to less compelling annualized returns, as the arbitrageur is not able to redeploy capital into new deals as quickly as expected.

If a deal fails entirely, it can lead to a realized loss of capital.

While the potential downside on a transaction in the event of a deal break is dynamic, an arbitrageur may make a baseline assumption that the target's shares could trade down to levels approximating their prevailing price before the announcement of the deal. As we have demonstrated, deals have historically been announced at a significant premium – on average, several multiples greater than the profit potential on the deal following announcement. For this reason, the risk/reward on a merger arbitrage position is usually described as asymmetric: even though the vast majority of transactions close, in those that don't, arbitrageurs have the potential to lose more than they can gain. Thus, while no arbitrageur is likely to be able to avoid all broken transactions, it is of the utmost importance to select an arbitrageur with the experience and skill to identify as many pitfalls as possible.

Merger arbitrageurs may seek to minimize the risk inherent in the strategy by:

- investing in the deals they believe have the highest likelihood of completion and the most attractive risk-adjusted return potential;
- sizing positions appropriately for the expected potential downside in the event of deal termination;
- diversifying the portfolio across a broad range of pending deals; and
- implementing various risk mitigation or hedging strategies.

Please see "Important Information" for disclosures at the end of this presentation.

How can an investor use merger arbitrage in a portfolio?

One of the most common use cases for merger arbitrage is as a **fixed income alternative**. The characteristics of a merger arbitrage investment include a defined upside (the deal value) and a defined timeline (the expected closing date). Thus, a portfolio of merger arbitrage positions is akin to a portfolio of bonds with defined interest rates and defined maturities.

The strategy's risk/return profile has historically been comparable to bonds, even though it utilizes a different side of the capital structure, while still maintaining low correlation and low beta to bonds.

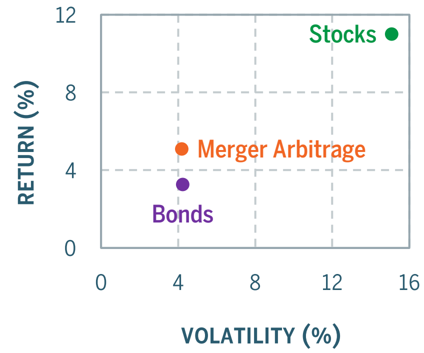
In addition, a key component of the deal spread is also the risk-free rate. Rising rates have historically acted as a tailwind for the strategy's returns, while they tend to act as a headwind for traditional bond investments, potentially making merger arbitrage an effective hedge during environments when traditional fixed income may be more challenged.

Since merger arbitrage returns are more correlated to the outcomes of idiosyncratic mergers and acquisitions rather than the behavior of the overall stock market, the strategy can also be used as a **portfolio diversifier** in an equity allocation.

Furthermore, its low volatility profile and strong capital preservation characteristics make it suitable as a **volatility dampener** or as a component of an investor's conservative allocation.

Lastly, the strategy has historically been able to generate consistent, positive returns regardless of market conditions, which may be attractive to investors seeking market neutral or **absolute return** strategies.

HISTORICAL RISK & RETURN



Date range: 1/1/06-12/31/25. Source: Morningstar. Past performance does not guarantee future results. "Merger Arbitrage" represented by HFRI Merger Arbitrage Index. "Stocks" represented by S&P 500 Index. "Bonds" represented by Bloomberg US Aggregate Bond Index. Indexes are unmanaged and one cannot invest directly in an index. Please see "Important Information" for disclosures at the end of this presentation.

DID YOU KNOW?

The structure of a merger arbitrage trade is quite similar to owning a zero-coupon bond. A zero-coupon bond is typically purchased at a discount to its face value, just as an arbitrageur purchases a merger target at a discount to the deal value. Likewise, if the bond is held until maturity, the lender receives its face value, whereas the arbitrageur receives the deal value upon reaching the closing date. Lastly, a bond has default risk, while in each M&A transaction there is a risk the deal could break.

THE FINAL WORD

While the particulars of merger arbitrage can be technical and complex, the ultimate goal of the strategy is simple: to profit by investing in mergers and acquisitions that successfully close and avoiding those that fail – and in doing so, the strategy has historically provided investors a non-correlated, low volatility return profile that is adaptable to a range of use cases.

GLOSSARY

Beta: A measure of sensitivity that indicates the tendency of a portfolio to respond to swings in an index in both direction and magnitude.

Bloomberg US Aggregate Bond Index ("Bonds"): An index designed to represent the performance of the broad market of US investment grade, fixed-rate corporate and government bonds.

Correlation: A measure of the strength of the relationship between a portfolio and an index, indicating the direction of moves in the portfolio relative to the direction of moves in the index, ranging from -1 (perfectly inverse) to +1 (perfectly positive).

Deal Flow: The level of announced M&A activity.

HFRI ED Merger Arbitrage Index ("Merger Arbitrage"): An index of hedge funds pursuing a strategy focused on opportunities in the securities of companies engaged in mergers and acquisitions transactions

ICE BofA US 3-Month Treasury Bill Index: An index designed to represent the performance of short-term US Treasury Bills, commonly used as a proxy for short-term interest rates and the risk-free rate.

Long: A purchase of a security or position in a security that was purchased.

Risk-Free Rate: The theoretical rate of return of an investment with zero risk (frequently represented by interest rates on short-term Treasury Bills in the United States).

S&P 500 Index ("Stocks"): An index of the publicly listed stocks of the largest US companies, commonly used as a representation of the performance of the broad domestic stock market.

Short: A sale of a security without being owned or a position in a security that was sold without being owned.

Spread (also: "merger spread," "deal spread," or "merger arbitrage spread"): The difference between the price at which a target company's shares currently trade and the price an acquiring company has agreed to pay, which forms the rate of return in a merger arbitrage investment.

Time Value of Money: The concept that a sum of money is worth more now than the same sum will be at a future date, due to its earnings potential.

Unaffected Share Price: The most recent share price of a merger or acquisition target prior to any outside influence caused by the announcement of a deal or any rumors, news reports, or speculation of a potential deal.

Volatility: Represented by standard deviation, a statistical measure of the degree of variation of returns around the average return.

IMPORTANT INFORMATION