Merger-Arbitrage Returns in a Higher Interest Environment
September 29, 2022

SUMMARY

With the Fed aggressively raising the Fed Funds rate to curb inflation, interest rates are suddenly significantly higher than zero. Merger-Arb investors should expect to earn higher than average returns since the expected return for each deal is the risk-free rate plus a risk premium to reflect the possibility that the deal does not close.

The objective of the Constantia Capital Merger-Arbitrage strategy is to earn returns in the range of 3% to 4% more than short term Treasuries. With returns on short term T-bills yielding close to 3%, our expectation is for returns in the range of 6% to 7% annualized in the current interest rate environment.

EMPIRICAL ANALYSIS

The above statement sounds logical, and we present below empirical evidence to back it up. While our Merger-Arb composite has an eleven-year track record, an average of eight mutual funds and ETF's that we track has a track record that stretches back to 1999. The fund ticker symbols are: MNA, MERFX, ARBFX, MRGR, GAKIX, EMAAX, HMEZX, and VARBX. (Note that the Constantia Capital Merger-Arb composite has significantly outperformed the fund average.)

A simple linear regression of monthly returns of the Merger-Arb fund average as the dependent variable against the 1-month T-bill rate shows a positive correlation of 0.136, and a slope that is positive with a statistically significant t-stat of 2.27. That proves our point, but it is difficult to put a meaning to those numbers.

Over the 22-year history of our data, the 1-month T-bill averaged a yield of approximately 1.5%. Another way of looking at the data is by dividing the universe into months where the 1-month T-bill yield was below average and those where it is above average. The table below shows that returns in the higher interest rate period were higher than in the low interest rate period. Also noteworthy is that the amount of outperformance is similar for both sets of data, at about 300 bps.

Table 1: Merger-Arbitrage Returns based on Interest Rate Environment (Nov. 1999 to Aug. 2022)

	Average 1-month T-Bill Rate	Average Merger-Arb Returns (Annualized)	Difference
Lower Half	0.34%	3.43%	3.10%
Upper half	3.37%	5.92%	2.55%

SENSITIVITY OF MERGER-ARBITRAGE TO CHANGING INTEREST RATES

The above analysis answers the question of return expectations given the current level of interest rates. But what happens as interest rates rise and fall? The Fed has raised the discount rate from approximately zero to over 3% and may not be done. 10-year US government bond yields have risen from 1.5% to almost 4% since the beginning of the year and the result is that the Bloomberg US Aggregate Bond Index, with a duration of 6.4 years, has fallen almost 15% year to date.

The average deal life over the 10+ years that we have managed our Merger-Arbitrage strategy is slightly less than 5 months. The average expected time-to-close of the deals currently in our portfolio is 4 months, or a duration of 0.33 years. In other words, Merger-Arbitrage returns are adversely affected by rising interest rates, but the impact is extremely low. Short term rates having risen by 300 basis points year-to-date has had a negative impact of 100 basis points on portfolio performance, not enough to overcome the inherent alpha in merger-arbitrage. That partly explains why our Merger-Arbitrage strategy is one of the few fixed-income alternatives that have managed to post positive returns year-to-date.

(Note that Merger-Arbitrage does have a positive, but low, correlation with Equity returns, but that is a subject for another post.)