



INDEX ARBITRAGE, OR HOW TO TAKE ADVANTAGE OF INEFFICIENCIES CREATED BY INDEX MANAGERS

According to **EMMANUEL TERRAZ**, Member of the Executive Committee and Head of Index Arbitrage Strategy since its launch in 2003, the explosion of the index management market has created opportunities for arbitragists able to take positions in securities affected by readjustments on the main indices.



What is the first observation that led you to develop an index arbitrage strategy in 2003?

Back in 2003, we noticed that index arbitrage was really starting to take off, and this trend has only grown stronger since then.

Today, on average in the developed markets where we focus our attention, index management has grown in scale and scope. The movement has mainly been driven by pension funds allocating capital to the various asset classes at lower cost.

From that standpoint, we were firmly convinced that playing on index readjustments – taking short positions in names being removed or long positions in names being added during the quarterly index rebalances – would generate opportunities for attractive returns.

How has the strategy's potential evolved in recent years?

Index arbitrage volumes have swelled over the past ten years, in pace with the rapid development of the index tracking industry. We provide liquidity to index managers whenever they have to replicate the readjustments by purchasing incoming securities and selling outgoing securities.

These transactions generate substantial additional volumes in these specific securities, thus creating price inefficiencies. The addition of a stock to the S&P500, for example, can generate investment flows of some \$10 billion and approximately €1 billion on the Euro Stoxx 50. As a consequence, this universe offers a very deep market.

Our strategy, however, is to allocate only 20% of the portfolio's assets to active arbitrage strategies, with the rest consisting of cash holdings. We are perfectly capable of managing hundreds of millions of euros in order to maintain sufficient room to manoeuvre, but we also want to keep a reasonable amount invested to ensure a satisfactory return. In practice, the arbitrage strategy has earned the portfolio a double-digit average annual return since inception.

You wanted to gradually add other strategies to your historic core strategy, index arbitrage. Why did you decide to diversify?

It's true, we set up corporate action and relative value arbitrage strategies. From the beginning our approach combined



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gualitative and guantitative analyses. A purely qualitative approach, based on interviews with corporate management, gives a sense of the company's business model and carries its own pros and cons. Conversely, a quantitative model optimised with multiple inputs can give you a multitude of data, but doesn't provide you the required level of understanding in the company lifecycle. So in addition to quantitative back-testing, we also try to get a handle on the rationale of index readjustments. They are often driven by corporate actions (mergers & acquisitions, IPOs, spin-offs, bankruptcies, etc.), which automatically spark large-scale buy/sell flows.

It's helpful to understand how these corporate actions work and how to take advantage of them. With a public exchange offer, for example, you see arbitrage between the target and the buyer based on the terms of the exchange: fair value is defined based on the likelihood that the exchange will go through. Corporate action arbitrage, which involves identifying securities whose price will be impacted by a specific event, follows on naturally from that. Another natural step forward is to look at relative value through pair trading, or arbitrage between two companies with the same business via a short position offset by a long position in order to remain market neutral. The goal is to benefit from mean reversion on two highly correlated assets. Our observation of additions/deletions within the indices, and their timing give us very good indications on the trends affecting various sectors and various companies, and this has enabled us gradually to implement this strategy.

What sets your approach apart from other hedge fund managers which rely on the same strategies?

Recently banks have cut down their proprietary trading, but arbitragists have stepped in the hedge fund universe, so volumes have been maintained.

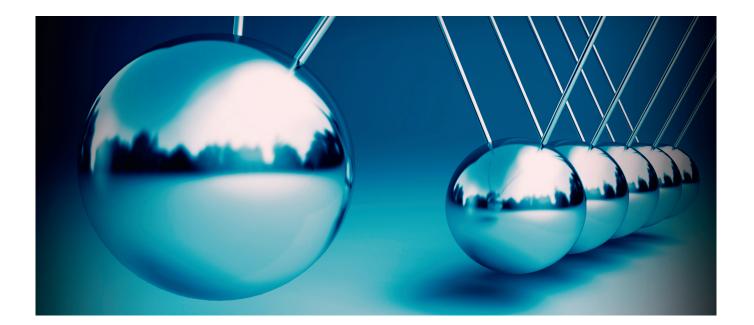
In the hedge fund universe, some funds based their performance on low-margin arbitrage strategies boosted with leverage. That's not how we operate. We focus on daily liquidity in a UCITS framework, with low volatility. The target is to achieve an absolute return ahead of Eonia.

To reach our target, we combine a cash bucket invested in short-term money market instruments (about 80% of the portfolio's assets) with an active investment bucket consisting of discretionary statistical arbitrage strategies in equities and indices. More importantly, we are equity market neutral so we are not impacted by the market environment, because our long and short positions are equally weighted (about 20%): net market exposure cannot exceed 10% and has often been lower than 1% since inception. Finally, the portfolio is highly diversified, with each individual position usually weighting at less than 1% of the portfolio.

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