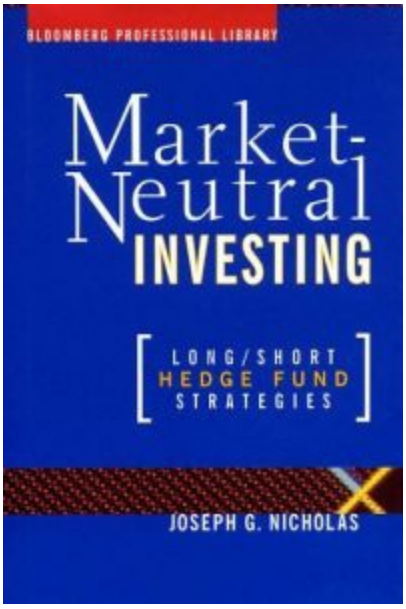

Book Market-Neutral Investing

Long/Short Hedge Fund Strategies

Joseph G. Nicholas
Bloomberg Press, 2000

Recommendation

Joseph G. Nicholas' thorough breakdown of market-neutral investing reveals some common threads and some striking differences between the most common strategies. Most of these strategies, some of which are based on newly developed financial instruments, are not available to average investors or even to many mutual fund managers. Instead, they serve as tools for money managers at the world's largest institutions. Nicholas uses mostly non-technical language and defines all important terms in a glossary, so that even a lay reader can understand. He also keeps math to a minimum. As a result, his book makes the seemingly dry realm of hedge fund investment techniques interesting and accessible while delving deeply into each strategy's approach to risk and reward. *BooksInShort.com* recommends this book to money managers, finance professionals and investors considering a hedge fund investment. But in light of the role that these strategies played in the collapse of former world-beater, Long-Term Capital Management, any student or professional would benefit from gaining at least a cursory notion of how they work - or don't work.

Take-Aways

- Market-neutral investment strategies involve taking long and short positions in related securities.
- All market-neutral strategies derive returns from spreads between interrelated securities.
- Market-neutral investment strategies offer superior risk-to-reward ratios, either by increasing returns or reducing volatility.
- Most leading practitioners of market-neutral strategies are managers at big institutions, because most other investors are not allowed to sell short.
- Choosing your strategy has more impact on return than choosing a manager.
- Most market-neutral strategies require complex mathematical models.
- Market-neutral managers seek related securities that will not move in the same direction as circumstances change.
- Managers must choose the correct balance between their hedge positions and can weight their positions to be bullish or bearish.
- These strategies are subject to market risk, event risk, credit risk and liquidity risk.

Summary

The term "market-neutral investing" refers to the use of a group of investment strategies intended to neutralize certain market risks by taking offsetting long and short positions in related instruments.

At first glance, these strategies seem to be quite different. But all market-neutral strategies derive returns from the relationship between long and short elements of the portfolio, whether that relationship occurs within the portfolio or within the instruments themselves. These strategies look for investments that are not correlated. Correlated investments offer similar returns under similar market conditions. Market-neutral strategies look for pairs of investments that behave differently under a given set of market conditions.

> "Market-neutral approaches do not eliminate risk entirely; rather, they allow managers to hedge unwanted risks and retain exposure to risks they wish to maintain."

Market-neutral strategies provide returns similar to those of long-only strategies, but with less volatility. Their risk-to-return ratios are greater than long-only strategies. Most mutual funds cannot sell securities short, but money managers at large institutions have an opportunity to capitalize off inefficiencies between various long/short positions. Thus, they are the leading market-neutral practitioners.

> "No matter how theoretically attractive a security may be, one must always consider the extreme: Can the position be unwound, and at what cost?"

Market-neutral strategies require a substantial investment in information technology and infrastructure. Managers and predictive models vary, but each market-neutral strategy has a core return. Managers only out-perform the core return in the short term. Choosing the right strategy is more important than choosing any particular manager.

> "Ninety-five percent accuracy may imply that a particular occurrence will happen only once in a lifetime, but there is no clue when in that lifetime."

The key to understanding market-neutral strategies is to identify the long and short exposures in each and discover which are hedge relationships. You can be fooled easily by appearances in this field. Thus, looking beneath the surface to understand these strategies is vitally important. Seven distinct market-neutral and hedged strategies are available:

Convertible Arbitrage

Convertible arbitrageurs take long positions in convertible securities, such as convertible bonds, convertible preferred stock or warrants, which can be converted to stock. They then hedge by selling short the underlying stock of each security. The return on this kind of hedge comes from the interest on the convertible security, the interest on the cash from the short sale and the value of the option to convert or the conversion premium. Under most conditions, these returns are not strongly correlated to overall market movement.

> "The only price that matters is the one that someone will pay."

With convertible bonds, a typical arbitrage position is neutrally hedged. In a bullish hedge, the manager has sold fewer shares short than would be needed to stay neutral. This increases the downside risk, but it allows the manager to participate more fully in increases in the price of the convertible and its underlying stock. A bearish hedge is the opposite. The manager sells more shares short than would be needed for a neutral hedge. This diminishes returns from gains in the underlying convertible, but it increases returns from declining stock prices.

> "Perceptions of happenings in the real economy, as well as perceptions of what future central bank policy will be, are as important as, if not more important than, the fundamental events themselves."

Managers must determine the appropriate hedge ratio - as calculated with a mathematical model - to maximize the risk-to-reward

ratio. Managers often adopt sell disciplines, which "unwind" positions by triggering sales at a target price or when certain events occur, such as new negative information or a liquidity squeeze.

Fixed-Income Arbitrage

This strategy involves investing in one or more fixed-income securities and simultaneously hedging by taking offsetting positions in other related, fixed-income securities. Arbitrageurs look for relationships that have been temporarily distorted by market events, investor preferences or other factors.

> "Market-neutral strategies all derive returns from the relationship between a long and a short component of the portfolio, whether that relationship takes place at the level of individual instruments or at the portfolio level."

Returns come from small pricing anomalies. This approach minimizes exposure to interest rates and other systemic market risks. Managers can increase their return (and risk) if they are willing to hold securities that are less liquid. Fixed-income arbitrage shows little correlation to general market indexes, but serious market downturns work against it.

> "Market-neutral strategies tend to have low correlation and low beta to the stock market. Thus their returns are largely independent of stock market fluctuations."

This strategy usually requires leverage, because spreads are small, so fixed-income arbitrageurs must be able to get attractive financing. They also need a considerable investment in information technology.

Risks for fixed-income arbitrage include interest rate risk, market risk and model risk. If rates drop, the prices of fixed-income securities will rise. Securities with a longer duration (i.e. average time to maturity) are more sensitive to this risk. Arbitrageurs try to eliminate this risk by structuring their trades so the duration is close to zero. Model risk arises because previously successful mathematical models may fail to predict future pricing relationships. Mathematical models carry "tail risk." They are never 100% accurate, so rare but inevitable and unpredictable events occur that even the best models cannot predict.

Mortgage-Backed Securities Arbitrage

A mortgage-backed security (MBS) is an ownership interest in mortgage loans that are made by financial institutions. The manager buys the best value securities then hedges them to zero duration using instruments such as treasury bonds, treasury options, futures, caps, floors, swaps and forward contracts. MBS managers use leverage and hedging techniques to manage risk and add value. MBSs are complex, so this kind of arbitrage requires powerful computing systems.

> "The relationship between securities is not necessarily a more stable source of return than the market, but it is certainly a different and non-directional one."

Returns come from the relationship between an undervalued MBS and the corresponding hedge constructed with U.S. Treasuries. The manager isolates an unusual spread between the two positions and makes returns when the spread goes back to its projected level. Leverage can increase both returns and risk. Most MBS arbitrage opportunities have small spreads, so most managers use leverage.

Merger Arbitrage

Merger arbitrageurs buy the stock of a company being acquired or merged with another company and then sell short the stock of the acquiring company. Typically, the target stock trades at a discount until the acquisition or merger is complete.

> "Technology can bring better data to the manager faster and make it easier to analyze, but the analysis is still the manager's realm."

Though merger arbitrage got a bad name in the 1980s, today's merger arbitrageurs do not make speculative investments based on rumors. They research announced mergers and evaluate possible outcomes, including event risk - the risk that the merger will not happen.

Merger arbitrageurs profit when they correctly anticipate the result of an announced merger and lock in the spread between the market price of the target company's stock and the price offered by the acquiring firm. These returns are event-driven. They are not strongly correlated with market moves because they come from the relationship between two companies' stocks.

Equity Hedge

This is not, strictly speaking, one of the market-neutral strategies, but it resembles them. Equity hedge managers combine long positions with short sales of stock or stock index options. Then they increase long positions in a bull market and short positions in a bear market.

> "Equity market-neutral managers must harness the power of quantitative models without erasing any advantage through their overuse."

Managers use investment themes to spot macroeconomic trends and to find companies that are positioned to take advantage of them. They focus on fundamental analysis. Quantitative analysis examines data about corporate financial well being. Qualitative analysis examines subjective factors, such as a firm's business plan and public sentiment about the firm.

> "Equity market-neutral managers believe that, in the long run, a system based on factors that have proven to have predictive value is more disciplined than a system that involves human emotion and intuition."

Risks include stock-picking risk - the specific risks that come with specific stocks - and market risk. Managers control risk with diversification, sell disciplines, and some leverage. Returns come from picking stocks that out-perform or under-perform the market. This is similar to traditional long-only investing on the long side, but on the short side, returns come from the manager's ability to spot flawed or overvalued companies whose stock prices will fall. This allows managers to make money in either up or down markets. This strategy offers smaller positive returns in a bull market but also smaller negative returns in a bear market. Over time, then, it offers similar returns but less volatility than traditional investments.

Equity Market Neutral and Statistical Arbitrage

These managers hold large numbers of long equity positions and an equal or nearly equal dollar amount of offsetting short equity positions. The goal is a balance of risk and reward, with a resulting total net exposure close to zero.

This approach is often very driven by quantitative models and is especially dependent upon technology. Many managers try to remove human discretion from their decisions. This strategy has three main steps:

1. Screening stocks.
2. Selecting stocks.
3. Constructing a portfolio.

Managers use their quantitative models to eliminate stocks. They may eliminate stocks that would be difficult to trade in large blocks or hard to sell short. They also try to measure the effect their purchases will have on stock prices. They look at technical and price-momentum factors, fundamental analysis and other factors. Their models generate rankings and buy-and-sell rules.

Returns are realized when long positions outperform short positions, regardless of the direction of the market. This may not be any less volatile than the stock market as a whole.

Relative Value Arbitrage

This combines several of the strategies above. These arbitrageurs focus on making "spread trades" that get return from the relationship between interrelated securities rather than the direction of the market. They look for related securities with a temporarily distorted relationship. Returns come when the relationship returns to normal.

These managers neutralize their exposure by taking both long and short positions, and add value by choosing the strategy that offers the best opportunity at any given moment. They can be distinguished from each other by which strategies they use. They can use any

of the strategies discussed here, plus some other, more obscure forms of arbitrage. They look for the best opportunities, but risk spreading themselves too thin or getting into markets that are beyond their expertise. They also face the risks of each strategy they choose, the risks of the mix they choose and the risks of their strategy weightings.

About the Author

Joseph G. Nicholas is an expert on alternative investment strategies. He is the founder and chairman of Hedge Fund Research LLP, an investment advisory firm, and Hedge Fund Research Inc., a supplier of hedge fund data. He co-founded the Zurich HFR Index Funds. He is the author of *Investing in Hedge Funds: Strategies for the New Marketplace.*