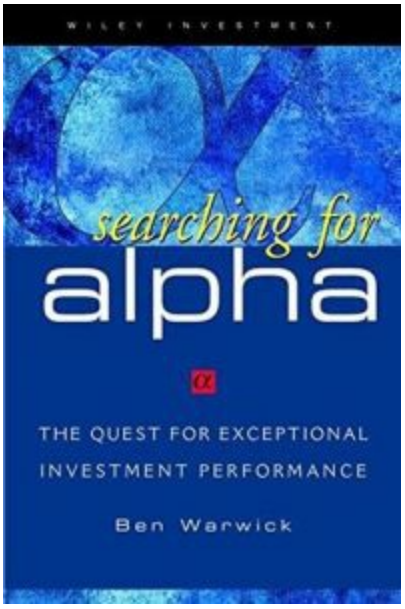

Book Searching for Alpha

The Quest for Exceptional Investment Performance

Ben Warwick
Wiley, 2000

Recommendation

By turns technical, analytical and anecdotal, Ben Warwick's expert investment guide takes you on a whirlwind tour of modern investment theory and practice. Accessible enough to reward dabblers in the field, this book at the same time raises serious issues and attempts to, if not explain them completely, at least point you down the path to financial enlightenment. Abstract or downright abstruse concepts are generously illuminated by side trips into the worlds of one-armed oil wildcatters, Beethoven, Dom Perignon and the mathematician who managed to stop Napoleon's invading armies. *BooksInShort* recommends this book as one of the finest overviews of financial theory, technique and practice ever to grace our library's shelves.

Take-Aways

- Significant differences exist between investing in a stock and investing in the market.
- The mutual fund industry will always underperform the overall stock market.
- Alpha is the portion of an investment fund's return generated solely by the skills of the portfolio manager.
- You cannot invest in securities without risk. Being in the market is a risk.
- The search for alpha begins with assessing and measuring the twin factors of risk and return.
- You must establish accurate benchmarks against which to measure an investment's performance.
- In a diversified portfolio, managed futures and arbitrage are viable alternatives to stocks and bonds.
- Far too little attention is paid to the consequences of taxation. Taxes are often an investor's largest single expense.
- Human behavior is not rational. Market performance cannot be accurately modeled by rational theories.
- As long as the human factor is present in the investment world, exploitable market anomalies will exist.

Summary

The Equation that Changed the Investment World

For all practical purposes, the modern investment world was born when Henry Markowitz, a student at the University of Chicago, challenged then-accepted theories in his doctoral dissertation. Starting with John Burr Williams' 1937 Theory of Investment Value, Markowitz came to some startling conclusions. The definitive market theory at the time came from Williams, who said the wise investor should buy only securities that trade at a price far below their true value, hold them and profit from a steadily rising dividend stream as the companies begin to prosper. Markowitz differed. He told investors to be as concerned with risk as with return. He developed a way to quantify risk and to differentiate the portion of return that represents a manager's skill from the portion that represents the market's direction. This value-added component of the total profit came to be called "alpha."

> "Investment is art. Science merely helps in the mixture of the paint, not in its application to the canvas."

Markowitz developed the portfolio concept, emphasizing buying groups of securities instead of picking stocks. He thought the rational investor would rather maximize expected utility (return in relation to risk tolerance) than maximize return with no concern for the risk involved. This approach follows naturally from the demonstrated fact that people will take risks to achieve wealth, but will shy away from risk once they have attained that goal.

John Maynard Keynes and the Psychology of Investors

Nevertheless, because of demonstrated instances of investor irrationality, some well-respected professionals disagreed with Markowitz's conclusions. Drawing from John Keynes's 1936 The General Theory of Employment, Interest and Money, these investors preferred to put all of their eggs in one basket and watch the basket, believing that the great fortunes are made by concentration. Keynes believed that professional investors choose their holdings based on predicting how the crowd will value a security in the relatively near future.

> "Research has shown that losing one dollar makes the average investor feel twice as bad as winning one dollar makes them feel good. As a result, investors are much more likely to hold on to sinking stocks and sell stocks that are appreciating in value."

Keynes' approach is wholly psychological: analyze the motivations of investors as a group so you can choose securities that will rise on a wave of investor confidence. These are the two fundamentally, historically opposed poles of the investor's dilemma: the rational Markowitz vs. the psychological Keynes, the numbers people vs. the stock pickers.

Systemic vs. Unsystematic Risk

At UCLA in 1960, Ph.D. student William Sharpe began working with Markowitz to refine the concept of risk. Sharpe said the stock market itself was the single most important determinant of a stock's volatility. This market variability, or "systemic risk," he said, is due to the general movement of the equity market. He labeled other risks as "non-systematic." Portfolio diversification cannot eliminate systematic (or "beta") risk - it is the risk of being in the market. However, diversification can eliminate unsystematic risk. Thus, Sharpe says, unsystematic risk has little bearing on a stock's value. Investors do not expect to earn a premium on stocks whose risks can be diversified away. These Capital Asset Pricing Model (CAPM) concepts have had immense influence on modern market theory. Even simplified, CAPM effectively illuminates many aspects of investment theory and market behavior.

Performance Measurement and Quantifying Alpha

As a natural offshoot of the CAPM, other models have been developed to quantify investment performance. While they differ, they all try to combine risk and return into a single measure. With varying accuracy, then, it is possible to compare, say, different mutual funds to each other, and determine which is a better buy. A fund's performance can be divided into: 1) the return of the market in which the fund operates, and 2) the additional return a manager generates by savvy buying and selling. If the S&P 500 rose 12% last year and your fund gained 14%, that's an added +2% value, the alpha generated by active management.

The Efficiency of Capital Markets

Alpha generation depends on managers being able to find and exploit mis-pricings or other market anomalies. Many active portfolio managers earn their livings by convincing investors that rigorous analysis of myriad arcane factors gives them an edge that allows them to beat the market. The fact that 70% of total invested funds, market-wide, are under active management proves that professional and individual investors support this approach.

> "The strong version of the Efficient Market Hypothesis has stirred much controversy. Its implications are profound - that fundamental analysis is doomed, that what hundreds of investment analysts do for a living is fodder, and that the $100 billion investment industry provides no real value."

Yet, some respected theoreticians say the market is so close to being perfectly efficient that an active manager can't match its returns over time. This idea gave rise to the efficient market hypothesis (EMH), a term coined in 1970 by professor Eugene Fama, who said that at any given time, asset prices fully reflect all available information. The "strong version" of the EMH is extremely controversial, given that it dooms fundamental analysis and implies that the $100 billion investment industry provides no real value to its customers.

Benchmarks and Indexed Funds

To evaluate the EMH property, experts realized some form of benchmarking was needed, some sort of an in-house portfolio to track the S&P 500 index and provide data against which to measure fund managers' performance. They quickly understood that beating the market was extremely difficult, simply because of transaction costs. If the benchmark returned, say, 9% a year, and annual management fees totaled 2%, a manager would have to bring in 11% for his clients just to equal market returns. In theory, then, it makes sense to buy a portfolio that mirrors the index and ride the market with minimal transactions.

Outperforming the Market

While investors should consider indexed funds as an efficient way to diversify their portfolios without the expense of actively managed funds, the index revolution has not solved all of the problems inherent in the investing process. Over the past five years, only one large stock fund has beaten the S&P 500 index. The reason goes to the core of mutual funds as a business venture. From a management perspective, economy of scale is everything: but the costs of managing a fund do not increase proportionally with a rise in assets under management.

> "The majority of mutual fund investors (are) more concerned with customer services than with financial performance."

Increasingly sophisticated new technologies have resulted in dramatically reduced trading costs for large mutual funds. Unfortunately, past a certain threshold, diseconomies of scale set in, to the point where transaction costs effectively increase with increases in trading size. This reflects the market impact of very large trades executed over short time spans. Once a fund grows past a certain point, it begins to consume alpha rather than generate it. From an investor's point of view, this is bad: the return investment in these funds begins to decline. However, the fund itself profits handsomely from increased asset volume, as management's gross income grows even as incremental investor returns begin to decline.

Arbitrage and "Risk-Free" Investing

Two widely used strategies are designed to increase return while minimizing risk. Market timers move in and out of stocks, working to be fully invested when the market is rising and fully divested when it begins to fall. Stock pickers, on the other hand, try to exploit significant differences between the price and value of a stock, profiting when prices eventually rise to reflect true value. Both of these approaches are based on forecasting, so to profit from either approach, an investor must be able to predict future trends accurately based on past and present information. Not surprisingly, forecasting ability is among the most highly valued skills on Wall Street. Nevertheless, accurate forecasting is nearly impossible. Accordingly, investors have always searched for an alpha-generating strategy that does not depend upon forecast accuracy. Arbitrage - one widely accepted approach - is finding and exploiting market mis-pricings that let you simultaneously purchase and sell the same or similar securities to lock in a riskless profit as the prices for the two securities converge.

Managed Futures

Futures and other derivative securities, widely derided by investors for whom they evoke visions of wild speculators risking everything on an attempt to corner the market, represent another valid approach to locking in risk-free profit. Despite their bad press, they provide significant benefits to the economy as a whole, particularly in allowing farmers to hedge price risks and helping companies manage their assets and liabilities more effectively. At the same time, futures offer attributes to investors that no other asset class can boast.

> "An alpha-generating strategy that is not dependent on forecast accuracy could present a desirable alternative to more traditional approaches."

Most significantly, futures contracts have inherent leverage, a feature not available to holders of traditional securities. Purchasing stocks or bonds requires at least 50% cash up front, but futures are traded on the basis of a security deposit known as margin, which is typically three to five percent of the value of the underlying contract. Furthermore, since this is not a loan, no interest must be paid. Finally, futures tend to move with the market when it is doing well, and in the opposite direction when traditional assets are doing poorly. In the current bear market, the use of managed futures to hedge against risk is a very viable alternative.

Taxes and Hedging

Unfortunately, too few investors or managers carefully think out the relationship of taxes to the pursuit of alpha. Taxes are often an investor's largest expense surpassing both commissions and management fees, yet fewer than a dozen studies have been published in this area. By and large, taxes are generated by the same activity you use to pursue alpha: active management. For this reason, any valid calculation of a portfolio's value must take into account the taxable consequences of cashing in a profitable position. Therefore, any taxable investor should minimize realized capital gains because of the tax impact under current U.S. law. For this investor, in fact, the closer a portfolio can come to zero turnover, the better.

> "When futures and cash markets get askew of one another, (arbitrageurs) buy the low price and sell the high price simultaneously, thus locking in a profit when the two prices converge."

Proponents of active management, of course, disagree, saying that this would not allow the investor to liquidate in anticipation of severe market drops, a move that they claim would generate savings that more than offset the tax consequences of liquidation. However, the futures markets offer an attractive alternative to liquidation, allowing taxable investors to initiate an overlay, a short position to hedge against such market drops. This tactic has gained widespread popularity amongst institutional and high-net-worth investors.

Behavioral Finance

Most financial theory assumes that people invest rationally, seeking maximum gain and minimum pain, hoping at best for market return, minus commissions, fees and taxes. How accurate is this perception of the inherent rationality of investors? As it happens, utility theory (as the behaviorists call it) systematically misrepresents human behavior. Humans are more likely to base judgment calls on learned principles, or rules-of-thumb, instead of rational thought. Because these rules are never precise, using them produces bias and outright error. Thus, rational choice theories are an excellent guide to how decisions should be made, but rarely reflect how decisions actually are made.

Technology and the Capital Markets

The final factor in the search for alpha is the influence of technology on capital asset management. Those who are first to exploit market inefficiencies, developing trends or technological breakthroughs may profit before the field becomes saturated with other practitioners, but in the end, larger, well-capitalized firms will take over every corner of the market first explored by daring individuals. These firms muster an ever-more-sophisticated arsenal of technical tools as they work to maximize their efficiency and derive the greatest possible profit from any investment area. Nevertheless, as long as computers are programmed by humans - who are occasionally irrational - market anomalies will exist, so smart investors can reasonably dream of exploiting them.

About the Author

Ben Warwick is a principal of The Bornhoft Investment Group, a registered investment advisor specializing in alternative investments, and of Warwick Capital Management, a quantitative trading firm. He holds his B.S. in Chemical Engineering from the University of Florida and an M.B.A. from the University of North Carolina, and has authored three previous books on finance and investing. A resident of Denver, Colorado, he is the Market View columnist for worldyinvestor.com, a financial Web site.