Ken Jacobsen

$$\frac{R_P - R_f}{\sigma_P}$$

BOOK REVIEW:

Dynamic Portfolio Theory and Management: Using Active Asset Allocation to Improve Profits and Reduce Risk, *by Richard E. Oberuc*

Reviewed by Stephen L. Kessler, CIMA, CFP

Dynamic Portfolio Theory and Management: Using Active Asset Allocation to Improve Profits and Reduce Risk
by Richard E. Oberuc
325 pages, hardcover, ISBN 0071426698
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The classic efficient-frontier approach to portfolio construction sounds great in theory but has failed in practice. In the late 90s, investors missed the upside because the market became too overvalued. During the past three years, they overinvested in equities because the theory wasn't sensitive enough to catch the short-term changes.

As a result, managers are discovering new techniques for tactically allocating assets across market sectors.

Intuitively, we expect the market to respond to changes in economic variables. The trouble is, we don't know which economic indicators carry the most weight, which ones lead or lag and when they are the most powerful. So in the preface to his new book, *Dynamic Portfolio Theory and Management*, Richard Oberuc throws us the following challenge:

"Either you believe that markets move because certain causative factors make them move or you don't. If you do not believe this, you will suffer whatever performance your buy-and-hold metes out. If you do believe in such dynamic causes, then you have a chance of reacting to changes in these underlying factors or not reacting.

The basic benefit from patient application of the principles and procedures detailed in this book is to shift the investment odds in your favor."

Academics and other researchers have generated a plethora of studies over the years exploring the impact of these various factors. Oberuc reviews many of these studies, sorts through the hundreds of indicators, and ranks them by prominence and effectiveness in forecasting returns for equities, fixed income and interest rates.

Oberuc's approach to portfolio construction removes problems of trying to determine expected rates of return, co-variances and volatilities by using his DynaPorte model, which responds automatically to changing market conditions by linking asset allocations to changes in macro-economic variables. *Dynamic Portfolio Theory* is not intended for math-phobic readers; it supplies sufficient theory to satisfy inquiring minds, and for those of us without a proficiency in advanced statistics, the conceptual discussions provide plenty to chew on.

Oberuc questions each of the Markowitz assumptions and compares its value in predicting portfolio performance to DynaPorte, which is a multivariate linear-regression technique based on macro-economic and market inputs. The explanation of the relative merits of mean variance, downside variance and mean absolute deviation as risk measures is most enlightening. This and other similar explanations alone make the book a worthwhile buy.

Separate chapters are devoted to the best indicators for stocks, bonds, interest rates, and pieces of hedge funds. Starting with perhaps twenty inputs, DynaPorte reduces to the best ones, perhaps five or six of the most statistically significant. Unlike neural networks, which take multiple inputs and screen them in mysterious ways to arrive at those that track historic performance most closely, DynaPorte shows why certain independent variables are retained and others discarded. Each variable is scored by its t-score, R-squared and other measures.

The integration of each of the individual models into time-sensitive, efficient portfolios makes the process work. Oberuc devotes a full chapter to the recent literature, discussing both the difficulties of getting good data and the tests for predictability of market returns. Again, a chapter worth the price of the book.

As opposed to market timing, which is an all-or-none approach to the market, DynaPorte allows for systematic variation in exposure to asset classes within whatever limits are desired. However, whether it's called market timing, tactical asset allocation or chopped liver is not really important. What counts is whether the historic in-sample results translate into out-of-sample portfolio benefits. In this case, it's enough to make a market timer weep tears of joy and wear the label with pride.

In-sample optimization of a stock, bond and t-bill portfolio from 1980 through 2001 showed a 5-percent annual excess return over a pure stock portfolio with substantially lower volatility. Another study using Fidelity sector funds did even better. Both studies accounted for transaction costs. Out-of-sample results were comparable. More remarkably, the portfolios continued to rise during the post-bubble period. It is important to note that the results discussed in the book did not just fall out of the massaging of the inputs. Many different combinations were tried over many months before coming up with a satisfactory model that fit the market's behavior. The techniques described are not a magic bullet. However, with increasing interest in tactically using index funds and multiple style portfolios, those tools able to rapidly handle a dozen or more market sectors deserve more of our attention.

Included with the book is a sample copy of the program for readers to test-drive. But whether or not consultants can replicate the types of portfolios created here, they need to give this book space on their shelves. Its real benefit is a full-featured discussion of all the factors that go into a robust model; its contribution to the modeling literature is significant.

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