



The *Dynasty MAPS Scorecard* for Assessing Hedge Funds Risk

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Over the past several years, hedge funds have become an increasingly popular investment vehicle both for institutional investors and high net worth individuals. According to the TASS Group there have been over 3,000 new hedge funds established since 1990 with total assets under management of \$600 billion up from \$300 billion in 1998. While many investors are eager to participate in the hedge fund market, the secretive nature and investment style of this asset class has limited the effectiveness of traditional measures of risk, making it difficult for potential investors to evaluate the risk / reward tradeoff. At Dynasty Capital, we believe that the fundamental nature of hedge funds requires a new approach to assessing risk. We have developed a framework, the *Dynasty MAPS Scorecard*, that provides a proprietary methodology for assessing the risk of a particular hedge fund. We believe that using MAPS forces the investor, whether a fund of funds or an institution, to consider the true performance of a fund.

The Problems With Traditional Measures of Risk

Basic portfolio theory states that the return on an investment should be equal to the risk free rate plus the correlation of that security to the market portfolio (Beta or β). The return for security I is expressed algebraically below:

$$r_i = r_f + \beta_i(r_m - r_f) + a$$

r_f - the risk free rate

β_i - the correlation of security I to the market portfolio

r_m - the market return

a - unexplained variation

There are many variations and enhancements to this equation, but the fundamental implication is the same—the investment return of a security is directly related to market performance. With our tools, it is possible to distinguish between the skilled investment manager and the manager who simply fills his or her portfolio with highly volatile securities.

However, much of the appeal of hedge funds has been related to a purported lack of correlation to market returns or “market neutral” strategy. Thus, in a bear market, a hedge fund investing in equities may still post excellent performance. In fact, many hedge funds emphasize *absolute performance* (i.e. 15% this year) as opposed to the *relative performance* (i.e. 3% better than the NASDAQ composite) metrics that investment managers have been judged by in the past. If a fund has no meaningful relation to the market (i.e. $\beta = 0$) then traditional portfolio theory breaks down and a new approach is needed.

The Dynasty MAPS Scorecard

The *Dynasty MAPS Scorecard* quantifies the unique risk properties of a hedge fund. We believe that there are four critical elements and risks in a hedge fund: Markets, Assumptions, People and Systems. Only by fully considering these elements can an investor evaluate the true risk / reward tradeoff. In all cases, risk should be scored on a 1 (lowest) to 100 (highest) basis.

1. **Markets Risk**- We believe that most hedge funds overstate their independence from market risk. In practice, most hedge funds show a relationship to the market portfolio and this should be considered in the evaluation of the fund. If a firm has a high correlation to the market, it should be given a score of 100.

2. **Assumptions Risk**- Assumptions are often difficult to assess because they often seem self-evident. For example, a fund may trade on the assumption that returns on high grade corporate bonds will converge to those of government securities. If this assumption is incorrect, the fund will lose all value. Firms that rely on critical investment assumptions should be given a score of 100.
3. **People Risk**- As in all fields, the people in a hedge fund are critical to its success. When scoring the people risk it is important to not only consider the current employees, but also potential turnover. What are the chances that key employees could leave the fund? A fund that has low quality people with a high potential turnover should receive a high people risk score.
4. **Systems Risk**- Since many hedge funds rely on complex trading strategies, evaluating the systems risk is critical. Key areas we focus on are: integration, redundancy, and stress testing. Make sure that the systems in the hedge fund can handle extremely high volumes or unexpected market events. Funds with weak systems in place should receive a high systems risk score.

Effectively Utilizing the Scorecard

When evaluating a hedge fund, one should score the each category from 1 to 100. Scores should then be averaged and compared to the investment universe. A hedge fund with a high *Dynasty MAPS* Score is a risky (although, possibly prudent, if the return is high enough) investment. It is also important to look for high scores in any particular area since only one category need fail to put capital at risk. Finally, firms should carefully monitor trends in these scores to distinguish and mitigate subjectivity in these scores.

Consider the Dynasty MAPS Scorecard as applied to Long-Term Capital Management (LTCM), a prominent hedge fund that nearly caused the collapse of the global markets several years ago. By all accounts the fund had tremendous *People* and *Systems* and was relatively unrelated to *Markets*— it would have received low scores in all these areas. But the firm relied on several key assumptions and would have received a very high assumptions risk. Had investors realized the assumptions risk in LTCM, investors may have avoided assuming billions in losses.

Conclusion

The Dynasty MAPS Scorecard is part of a constantly evolving framework we use to evaluate investments and the global economy in general. Creating value must involve measuring risk, and with thoughtfulness and completeness. We believe that many of the tools of the past must not be forgotten, but must be re-forged to deal with new realities. The Dynasty MAPS scorecard will help investors develop a structured means to evaluate potential investment opportunities in the hedge fund asset class.

Long-Term Capital Dynasty MAPS Scorecard

Markets	10	Fund should not be correlated to performance of markets.
Assumptions	100	Fund performance driven by arbitrage theory. If theory breaks down, capital is at risk.
People	5	Strong management team. Managers are well invested in fund and unlikely to leave.
Systems	5	Systems have been stress tested.
Average	32.5	Firm should has an average overall risk.
High	100	High assumptions risk suggests an overall cautious approach.

Mr. Tom is the Chairman of Dynasty Capital Services LLC, a strategic and financial advisory firm. For more information on our services and people, please visit us at www.dynastycap.com.