



Institutions & Hedge Funds; Son of LTCM; Graham-Dodd Investing; Performance Measurement w/ Random Portfolios

The Role of Hedge Funds in Institutional Portfolios: Part IV

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This article is the final installment in a four-part series on the role of hedge funds in institutional portfolios.

In this article, we will cover three additional frameworks for institutional hedge fund investing: (1) as traditional factor exposures with additional returns from market segmentation and liquidity premia, (2) as total-return vehicles accessed through fund-of-hedge funds, and (3) as unstable factor exposures.

Traditional Factor Exposures with Additional Returns from Market Segmentation and Liquidity Premia

Terhaar et al of UBS (2003) emphasize the natural consequences of diversification as it applies to both traditional *and* alternative investments:

Any individual alternative investment may have low correlation with other assets in the portfolio. But when investors build well-diversified alternative investment programs, the systematic influences – underlying economic fundamental drivers – become more significant and the residual noise diminishes. Hence, the more diversified the private equity, real estate, natural resource or hedge fund portfolio, the more correlated it is likely to be with public markets.

The UBS researchers also discuss how alternative investment return data are problematic at best. The data “suffer from illiquidity and infrequent pricing biases, ... [and] also are

fraught with membership and survivorship biases.”

Their recommended solution is to use a factor approach to build a consistent set of forward-looking return and risk characteristics for conventional *and* alternative asset classes alike.

Their chosen factors attempt to reflect the underlying economic exposures of the assets and strategies. Each investment, including hedge funds, is represented by some combination of these systematic risk factors plus a risk premium, reflecting the investment’s level of market segmentation, and illiquidity.

Total Return Through a Fund-of-Funds

A defining feature of hedge funds is their boutique nature. A hedge fund may only have one or two key decision-makers, for example. This does not give a lot of comfort to institutional investors who require a deep team of investors carrying out a disciplined and repeatable investment process that does not rely on any one individual for its continued success.

Fund-of-funds provide the type of structure that gives comfort to institutional investors. One possible organizational model is for institutions to use fund-of-funds to diversify away idiosyncratic, operational risk of an individual hedge fund. In this framework, one should not compare individual hedge funds to mutual funds but instead should see fund-of-funds as the analog to mutual funds.

However, Schneeweis et al (2001) warn that fund of funds:

... may be market timing and are less useful in asset allocation strategies since ... [both their] factor sensitivity and [investment] composition change in contrast to more style-pure hedge fund indices or strategies.

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Points of Interest

- Membership: 20,000!
- Over 200 PRMIA Chapter Meetings Hosted in 2004
- Over 15,000 delegates attend PRMIA meetings in past 12 months
- PRM certification counts candidates from more countries than any other

Hedge Funds in Institutional Portfolios (Cont.); Modern Approach to Graham and Dodd Investing

Drawing from Schneeweis et al's work, if one needs control over the factor exposures of their investments, then fund of funds may not be the appropriate vehicle for an institutional investor. But instead if one were treating their hedge fund investment as a separate asset class with a total-return "bogey" or benchmark, then an FOF investment would be appropriate.

One could argue that a fund-of-funds effectively becomes a "surrogate plan sponsor" since they control the factor exposures of their slice of an institution's investment. In that case, the proper benchmark for a fund of funds might be a diversified portfolio of stocks and bonds as represented by a 60% equities/40% bonds balanced portfolio.

Unstable Factor Exposures: "Style Drift" or "Real-Time Reaction to the World?"

Brealey and Kaplanis (2001) point out that hedge funds generally do not have stable exposures to market factors.

This point gets to the heart of whether an institutional investor will embrace hedge funds or not. One successful hedge fund manager has been quoted in Clow (2003) as stating:

The willingness to do what we call real-time reaction to the world was called style-drift ... People would say, "If you're a swordfisherman, fish for swordfish."

An investor with this particular hedge fund manager notes:

What the firm does very well is acquire competence in areas it doesn't know. It's a bottom-up process of figuring out where there is opportunity.

Correspondingly an investor may instead be uncomfortable with an investment having unstable factor exposures. Bennett et al of Ennis Knupp + Associates (2002) ask:

... is this the way investors expect to make money in hedge funds – through a series of timely factor bets?

If the answer is no, it means that one does not want their fund-of-fund manager to become, in effect, a surrogate plan sponsor. One may then conclude that hedge funds cannot be integrated into an institutional investment framework. As a matter of fact, Ennis Knupp + Associates write that:

... our standard advisory position is that we do not advocate hedge funds. We believe most clients with well-designed investment policies are better off without them.

Conclusion

This last sentence may be a controversial way to end a series of articles on hedge funds. But as the economic historian, Peter

Bernstein, stated in a *Pensions & Investments* interview, one should be careful about expecting:

... a degree of neatness about the investment process [because] there is nothing to neat about it. It's very hard.

Bennett, Phillip, Ennis, Richard, and Michael Sebastian, "Hedge Funds: Return Enhancer or False Hope," Ennis Knupp + Associates, Working Paper, October 2002.

Brealey, Richard and Evi Kaplanis, "Changes in the Factor Exposures of Hedge Funds," London Business School, Working Paper, January 2001.

Chernoff, Joel, "Radical Thought: Bernstein Suggests Policy Portfolios No Longer Make Good Sense," *Pensions & Investments*, March 17, 2003.

Clow, Robert, "Case Study: Farallon Capital," *Financial Times*, Special Report on Hedge Funds, 6/16/03, p.3.

Schneeweis, Thomas, Kazemi, Hossein, and George Martin, "Understanding Hedge Fund Performance: Research Results and Rules of Thumb for the Institutional Investor," CISDM and Lehman Brothers, November 2001.

Terhaar, Kevin, Renato Staub, and Brian Singer, "Determining the Appropriate Allocation to Alternative Investments," [Journal of Portfolio Management](#), Spring 2003, pp. 101-110.

Book Summary: A Modern Approach to Graham and Dodd Investing by Tom Au

*Contributed by Tom Au
Vice President, Times Square Capital
PRMIA Member Since November, 2003*

"A Modern Approach to Graham and Dodd Investing" preaches that we should invest much as Benjamin Graham and David Dodd did in the 1930s, based on a belief that the world is on the brink of the modern 1930s. That's because the 1990s were the modern version of the 1920s, with the Internet in modern times playing the technological role that radio and automobiles played in the earlier time period, resulting in overinvestment, overconsumption, and overborrowing in each case.

The root cause of the problem today is the easy money policy of the U.S. Federal Reserve Board, and the concomitant leveraging of the U.S. and world economies. This in turn led to inflated prices for stocks, real estate, and other assets, which were bid up with "funny money." Meanwhile, the United States became increasingly dependent on the "kindness of strangers," because of its low domestic savings rate.

A Modern Approach to Graham and Dodd Investing (cont.); The Son of LTCM

One result is the overvaluation of the stock market in the United States and elsewhere. The book does calculations that support the opinion of William Gross of Pimco, that the Dow is worth only about 5000. Specifically, that was approximately the “bond value” of the Dow, with the balance representing a “call option” on the new economy. Similarly, the fall in Nasdaq from 5000 to its “bond value” of 1000 was due to the 4000 points of “optionality” found in the index.

The Graham and Dodd stock selection methodology focuses on stocks with high dividend yields, low P/E ratios, or ones with market caps that are less than the company’s asset values (as determined either by book value, or some alternative industry-specific measure) or some combination of the above. The whole point is to remove consideration of “optionality” from the process. A stock selling around book value, if it also has a dividend yield, can be considered to have many of the characteristics of a convertible bond, with asset values and cash flows providing protection on the downside, but with no cap on the upside. If the stock has no yield, it would have to sell at a discount to book (like a zero coupon bond) to provide the same protection.

Value investing can be used in many ways, 1) stock selection, in which value generally out returns growth (after factoring differences in dividend yields), and 2) analysis of the stock market, which appeared to be too high in the United States around the turn of the century. One of the main tenets of investing is that returns on stocks ought to be compared to prospective returns on other assets such as bonds, cash, and real estate. When a value investment strategy is integrated with other risk management models such as tactical asset allocation (between stocks, bonds, and cash) and multifactor analysis, the result can be very effective risk control.

An overvalued market is often reflected in social trends. There is an old saying that when necklines plunge, so do stocks, and

if so, the record plunge in Janet Jackson’s neckline at the Superbowl this year, may signal a record plunge in stocks. (The book doesn’t contain this vignette because it was in press at the time.) That’s because social recklessness usually accompanies economic recklessness. It’s probably not an accident that someone’s so-called “wardrobe malfunction” took place at about the same time as the Enron indictments, the Tyco trials, and Martha Stewart’s and Frank Quattrone’s convictions.

The last chapter of the book contains a time series model that explains why a crash likely to happen now (in the 2000s decade), rather than during the “Depression of the 1990s” postulated by writers like Ravi Batra.

You can view more about this book at <http://www.amazon.com/exec/obidos/ASIN/0471584150/prmia-20>

The Son of Long-Term Capital Management

*Contributed by Christopher Whalen
PRMIA Member Since January 2004
<http://institutionalriskanalytics.com/index.html>*

Our nomination for financial quote of the year comes from the September 2004 issue of Euromoney: "If a strategy can't make money in its own right then it's not necessarily going to work because leverage is added."

For the past several years, the US central bank has maintained a policy of keeping interest rates below the inflation rate, this in an effort to pump up the financial system after the US equity market blowout and subsequent scandals. Briefly making the cost of credit artificially low or even negative may be a good idea during times of illiquidity, but when fiat paper dollars are in great abundance, as today, the Fed's policy of easy money

Over 395 Jobs Posted On the PRMIA Jobs Board: 145 New This Month

The PRMIA Jobs Board is a free resource to PRMIA members. Over 25,000 job searches take place each month on the board and this month, over 395 Jobs in fourteen countries are listed.

Senior Manager, Integrated Risk Management

*Salary: US\$Competitive
Stockholm, SE*

Each month we randomly feature some of the latest postings, but be sure to search the entire database to see what is available. All job listings can be found by clicking <http://www.prmia.org/jobs/jobs.php>.

Corporate Tax Director

*Salary: US\$Competitive
Zurich, CH*

If you're looking to hire, you can post your openings for free and can even use the search utility to find a certified PRM to

Risk Management Specialists (Various)

*Salary: US\$350,000 to US\$1,000,000
London, UK*



Other PRMIA News and Items of Interest

PRMIA Membership Passes 20,000 Globally

We're very pleased to announce that on December 17th, 2004 the 20,000th member of PRMIA registered on our web site.

This milestone is realized fully one month before PRMIA's third anniversary and is a testimony to the contributions of the more than 400 volunteers involved in PRMIA.

PRMIA is the premier meeting place of the risk profession. We think that is very aptly reflected by noting that our 20,000th member comes from Canada, the 20,001st is from China and the 19,999th comes from Germany.

PRMIA members now come from 149 countries and have access to free resources via the PRMIA web site and open access to PRMIA chapter meetings around the world. In 2004, over 200 such chapter meetings have been held, with more than 15,000 total delegates participating.

Invite a friend to PRMIA at: <http://prmia.org/site/members/invite?I=>

PRM Candidates Come from More Countries Than Any Other Risk Certification Program

Now the PRM is not only the only globally endorsed certification for risk managers, it is the top certification program for risk managers as measured by global presence: the PRM program counts candidates from over 65 countries! No other program matches this breadth of acceptance.

Supporting this growth is the availability of the PRM Handbook, which has been purchased by PRMIA members in more than 75 countries and the fact that the exams of the PRM program are offered in over 140 countries.

In just two years, the PRM program has become the global standard against which risk managers can be measured for their

knowledge and understanding of the building blocks of the successful professional risk manager.

How do you tell your Board, CRO, auditors, regulators and other external parties that your risk staff is up to the job? You can, if they are PRM certified.

Learn more at <http://www.prmia.org/certification/cert.html>.

Mark Your Calendar for Top Risk Management Events of 2005: Beijing, China and Chicago, USA

PRMIA is very proud to announce that it has renewed its partnership with North American actuarial associations to co-host the Third Enterprise Risk Management Symposium in Chicago on May 2nd and 3rd.

In addition, PRMIA is proud to announce its partnership with the World Bank, with the support of the Chinese Banking Regulatory Commission, to host the 2005 Global Risk Conference in Beijing China, from May 25-27.

Both of these events are set to be the top risk management gatherings of the year.

In Chicago last year, nearly 400 delegates gathered from multiple disciplines and geographies to discuss the emerging trends in enterprise risk management. This year, we expect between 500 and 600 delegates to participate.

Our event in Beijing is the first that formally reflects our partnership with the World Bank to bring risk management best practices to all parts of the world. Leaders from China, Asia, the US, Europe and other parts of the world will take part in a unique gathering focused on the world's risk management challenges.

Register your interest in either or both of these programs at: http://www.prmia.org/2005_Conferences/register.html

Top Scores in Fourth Quarter 2004 (to-date)

Exam I - Finance Theory, Financial Instruments and Markets

Rajneesh Motay, Alabama, US

Exam II - Mathematical Foundations of Risk Measurement

Anand Balasubramanian, Bangalore, India

Exam III - Financial Risk Management Practices

**Reinhard Matuschka, Munich, Germany
Rafal Lerski, Warsaw, Poland**



Congratulations to the Top PRM Candidates

Exam IV - Case Studies, Standards of Best Practice, Conduct and Ethics, PRMIA Governance

Kenneth Christensen, Calgary, Canada

encourages aberrant market behavior and thus begs the question of credit quality.

The growing retail preference for short-term hedge funds is an ominous comment on market psychology. By using liquidity to address the coincident implosion of the real and speculative economies, the Fed has hurt all varieties of investor. Risk averse investors and banks are forced to move out the risk curve to maintain returns, while more risk tolerant investors target even more problematic opportunities. The rising importance, in both relative and absolute terms, of the liquidity provided by hedge fund investors makes for a less stable market. Maybe Jeremy Grantham is right when he says the market has another 30% to go on the downside.

Leverage: The Stupid Man's Game

Because tepid market performance has deprived the hedge fund maggotry of easy returns, they have turned to the stupid man's game - more and more leverage - to provide the profits that low volatility will not. It is common knowledge within the risk community that certain hedge funds and other active customers responded to sub-par market performance by increasingly the degree of leverage in their asset structures. Even the most cheery capital markets tomes carry extensive discussions about the burgeoning credit risk imbedded inside hedge funds that rely over-much on leverage and the future "crisis" this leverage implies.

When you consider that the trillion or so dollars worth of assets now deployed in the hedge fund universe represents roughly half of the liquidity in the credit derivatives market, maybe its not so strange to see SEC chief Bill Donaldson waxing intemperate about systemic risk vis-à-vis the hedge funds. Yet it is the silence of Chairman Greenspan on this issue, and not Donaldson's sincere yowling, that truly deserves your attention.

The masters of the universe on the sell side have managed to fund the double-digit expansion of the credit derivatives markets on the shoulders of the hedge funds and the largest banks. The source of greatest vulnerability to the financial markets is clearly concentrated in the former group, although the banks end up bearing some of the liability for their client's acts.

Systems and controls are only notional concepts inside many hedge funds, where oversight of trading by individual managers is often light and strategies change with the latest headline or personal impulse. Some managers do bring great intellectual rigor to the stock picking process, but trust us when we say that Dennis Miller's chimp and a dartboard would provide returns above the mean performance of hedge fund managers in 2004.

House Accounts

Best of all, some hedge funds are housed, supported and provided easy credit by banks and BDs seeking to capture the hedge fund's commission dollars. These hedge fund "hotels" often include office space in buildings where the banks or BD's opera-

tions are also located. As and when one of these rocket shops implodes a la LTCM, there may not be enough space inside the board room of the FRBNY to accommodate all of the aggrieved parties - especially when you remember the close, daily relationship between the sales desk of the host bank or BD and the hedge fund.

Orwell notes at the end of *Animal Farm* that it is tough to tell the pigs from the people when big money is involved. In the wake of the proposed rules on Complex Structured Financial Instruments, a cynic might argue that the bank or BD and the hedge funds they house are part of an active association, even a conspiracy.

Leaving aside the question of reputational/Spitzer risk, the real issue facing the credit market is whether the bank or BD now providing credit to the next LTCM will try to conceal the fact until the problem festers beyond easy repair. As a senior risk officer in New York told us last week, "systemic events occur when people are surprised."

Working Paper Summary: Performance Measurement Via Random Portfolios

Contributed by Patrick Burns

Burns Statistics

<http://www.burns-stat.com/>

PRMIA Member Since April, 2003

There are four themes of this paper:

- Information ratios relative to a benchmark have several weaknesses when used for performance measurement.
- Random portfolios (that obey constraints but disregard utility) can be used to provide accurate assessments of investment skill.
- The definition of risk that leads to focusing on tracking error is probably inappropriate in most cases.
- Random portfolios can be used to form investment mandates.

During some periods a particular benchmark will be easy to beat, and during other periods difficult to beat. This has been noted before (though perhaps not taken as seriously as it should have been), but the phenomenon can be quantified by using random portfolios. Information ratios do not, in general, have the variance that is natural to assume for them. The variance of information ratios depends on the dispersion of the asset returns for the period. Because of these two issues, assessments of the skill of fund managers using information ratios relative to a benchmark contain a large amount of noise.

Random portfolios provide a clean measure of investment skill

since they are generated from the same environment that is faced by the fund manager. The only thing that needs to be known or approximated is the set of constraints used by the fund manager. The only restriction on the utility that is employed to compare the fund manager against the random portfolios is that it has to be computable with the data at hand. There are no statistical distribution assumptions that need to be made.

Basing investment decisions on utility relative to a benchmark implicitly assumes that the liabilities are equal to the benchmark. This is almost never true. If the benchmark is, for example, the S&P 500, it is seldom the case that the risk is zero when the fund exactly reproduces the index.

The correct approach to use when liabilities are only known with uncertainty is (apparently) yet to be discovered. The paper hypothesizes that the absolute utility of the portfolio is closer to the mark (where "absolute" means not relative to any benchmark). If the absolute utility is used and passive investment in the benchmark is a possibility, then active funds should tend to maximize tracking error. This is in stark contrast to using utility relative to the benchmark where tracking errors should ideally be small.

Random portfolios can be the driving force of investment mandates. The active fund manager can then have more freedom to implement investment ideas instead of being confined to a neighborhood of the benchmark. In this approach the investor has a clear and coherent means of judging the manager's performance. The random portfolios can even be used as a basis for a performance fee, which (if done well) aligns the interests of the fund manager with those of the investor.

Notes from the PRMIA/RMA Capital Allocation and Basel II Conference in NYC

*Contributed by Christopher Whalen
PRMIA Member Since January 2004
<http://institutionalriskanalytics.com/index.html>*

This year's New York conference by the Risk Management Association was co-sponsored by the Professional Risk Managers International Association and focused on the New Basel Capital Accord, a.k.a. Basel II. Here are some of the observations from the two-day conference:

Operational Risk

Most large money center banks have begun to gather unique data on operational risk events, including descriptions of the loss, cost, and other characteristics. Unclear if the errors by officers and senior managers are to be explicitly captured by op-risk data or will, as today, be dealt with by the D&O insurance underwriter as an "unforeseen" event. The infinite factor of "reputational risk" is clearly not included in op-risk measures and likewise may (or may not) be covered by D&O insurance. As one Swiss insurer quipped: "Claims are meant to be denied."

While unanticipated operational risks clearly remain the province of insurers, the predictable events in the op-risk basket will remain a source of exposure to banks. One risk officer from JPM reminded the assemblage that it will take decades of properly gathering data on operating risks to reap any benefits such as a statistical frequency and magnitude for "expected" loss events. In the meantime, there will be a data gathering bunny hunt underway inside each money center bank as the deadline for Basel II implementation approaches.

Mark to Model

Participants were reminded by officials from the Fed and OCC that banks are going to be required to spend considerable time and resources validating internal data and models used to justify ratings and risk weightings. One Fed official was heard to say that commercially available Merton models such as market leader Moody's KMV are "a point of departure," but that banks will need to create and defend their own internally generated risk ratings to achieve advanced IRB status. This tracks conversations we've had with bankers and Washington regulators alike suggesting that the "stressed" version of PD and other Basel II factors may become the de facto reference point until a certain degree of confidence is reached among regulators.

Disclosure

Basel II requires banks to disclose far more information about internal operations than ever before, both to regulators and to investors in the case of publicly traded companies. More than one observer noted that for public banks, many of the risk management and disclosure activities being pursued for Basel II would be required under Sarbanes-Oxley anyway. Another related issue discussed was the extent to which national regulators would interpret the Basel II framework differently from that of regulators in the bank's home market.

Our question to a senior Citibanker was this: How will banks reconcile the disclosure of proprietary information under Basel II, including models and precise methodologies for risk management, with the full disclosure mandated under Reg FD and other SEC requirements? His reply: When banks pursuing the advanced levels of Basel II have sufficient confidence in their internal models and ratings methodologies to actually put them in an SEC filing, and have their CEO/CFO sign off on it, then the Basel II banks will have arrived.

Good answer.

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Profile: Regional Director Support and Standards Committee

Statistics

Total PRMIA Chapters: 59
 Delegates in Past 12 Months: 15,600+
 Total Meetings Hosted in 2004: 204

Committee Focus

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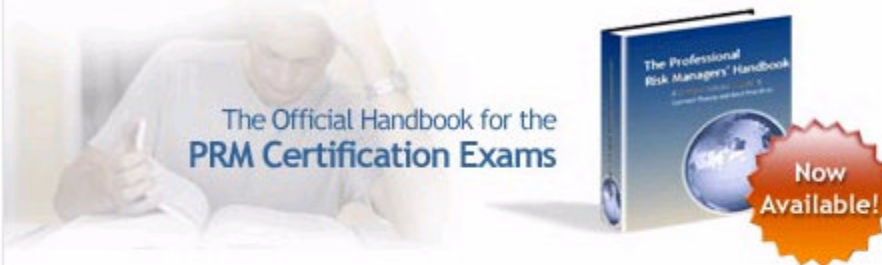
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The Professional Risk Managers' Handbook:
A Comprehensive Guide to Current Theory and Best Practices
 Edited by: Prof. Carol Alexander and Prof. Elizabeth Sheedy



Edited by [Carol Alexander](#) and [Elizabeth Sheedy](#) and with in-depth contributions from over [35 leading risk and finance practitioners and academics](#) from around the world, The **Professional Risk Managers' Handbook** is the official study manual for the PRM certification exams. The Handbook has been written to cover the PRM syllabus in a comprehensive and practical manner, offering students the very best study materials available. Each chapter tackles the theory and practice of risk management and includes a wealth of case studies, practical information and worked examples.

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