Global Macro from an investor's perspective

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Highlights

Recent developments in the global macro and fixed income space might come to be seen in hindsight as important events in the growth and evolution of this particular strategy, with implications for the wider hedge fund industry. Assets under management have grown significantly and the index returns for macro have been good. This has fuelled a significant increase in the number of macro funds, with many new funds established in the last year and the emergence of a few «mega» funds with $4b to $7b under management. Capacity of the macro strategy has become a critical issue for allocators and the Man/Bluecrest deal is indicative of these pressures. However, the dispersion of macro funds' returns within Europe has increased significantly in 2003 and the strategy faces many important questions: definition, capacity, sustainability, leverage, transparency. How these questions are answered and the returns generated by global macro in future years will determine the evolution of this particular strategy. In many ways, these questions are also at the heart of the debate about absolute and relative returns, their attractiveness and suitability as vehicles for capital preservation/accumulation, and their place or value in a portfolio. Interesting times are ahead; not just in macroeconomic terms but also for the hedge fund industry.

Asset growth and returns

The amounts of assets managed under the absolute return umbrella have seen continued growth in 2003 and the macro strategy has been a notable beneficiary of this. According to the TASS database, total assets for hedge funds rose some 37% in the first nine months of 2003, and reached $427b by September 2003. Global macro received

some $7.3b of inflows, increasing assets by approx. 31% to $40b, which equals 9.5% of assets invested in the industry as a whole.
This contrasts with earlier periods of growth, where macro failed to capture a significant amount of new allocations (macro hedge funds were 71% of the $39b in hedge funds in 1990 based on Hedge Fund Research data). Markets in 1994 and 1998 suggested that there are systematic risks within the macro/fixed income strategy that cannot be diversified away (despite the diversity of macro strategies). Consequently, strategies such as long/short equity captured a significant proportion of the dramatic growth in assets during the last 10 years as the demand for hedge funds' absolute return capabilities increased and the need for a defined strategy in terms of market or product focus, geographical exposure and strategies that could be quantitively analysed, drove investor needs in general and the requirements of institutional investors in particular.
The data in Table 1 below taken from CSFB/Tremont shows that hedge funds in general and macro in particular have last year shown performance in line with stock markets, but significant out- performance over the last three years, with lower volatility and significantly better Sharpe ratios and other relevant performance statistics.

Questions and challenges

This growth in assets poses many important questions for the industry and likewise for global macro in terms of capacity, optimal size, leverage, transparency, diversity of strategies and the sustainability of these returns in the future. Perhaps the most poignant question is whether hedge funds genuinely provide risk-adjusted returns or alpha, whether the industry is capable of implementing asymmetric returns, and whether risk management techniques are sufficiently developed to ensure consistent and sustainable returns within this framework.
A number of articles this year (ABP, July 2003, «A Reality check on Hedge Fund Returns» and Bridgewater, June 2003, «Hedge Funds Selling Beta as Alpha») have questioned many of these assumptions.
As the number of macro funds, and in particular european fixed income macro funds, has proliferated it is important to understand and address the issues of «backfill» and «self selection» biases. As capacity and optimal size of macro funds pose challenging questions, it is important to understand the diversity of particular styles or strategies within macro, the concentration of those styles and the risk distributions underlying each macro fund's strategy. Leverage and transparency become critical to the process of selecting managers and understanding the true descriptive aggregated risk distributions of these portfolios.

Asymmetric returns, macro risk and correlations

The figures provided in the Bridgewater article show a lower degree of correlation between managers in the macro subset than for other strategies (47% vs. 63% for long/short equity and 66% for event driven). Global macro is notable in its flexibility regarding investment opportunities and strategies. As a result, macro managers have tended to be a very diverse group. In terms of diversification, this heterogeneity is good and hence the correlation between managers is low. Ineichen («Absolute Returns», 2003) points out that the normalized distribution of the HFRI macro index is more narrow (i.e. less volatile) than the normal distribution of the MSCI World, and that the mean is further to the right. This suggests that while individual managers may be volatile (rather like a single small stock), in aggregate, given the diversity of strategies and the low correlation between managers, much better risk-adjusted returns can be achieved. This is a clear demonstration of the potential alpha generated at the fund of funds portfolio level. Amenc, El Bied and Martellini (AIMR Journal, Sep/Oct 2003) provide evidence of predictability in hedge fund returns that provides the basis for tactical style

Table 1 | Performance comparison

Net Performance	CSFB/Tremont Index	CSFB/Tremont Macro	Dow	MSCI World $	EuroHedge Index	EuroHedge Macro
1 yr	14.44%	16.83%	9.96%	19.76%	6.48%	6.09%
3 yr Avg	7.74%	18.21%	-2.07%	-4.94%	5.16%	5.58%
Inception ann. Avg	11.00%	14.40%	-4.04%	6.99%	6.74%	6.05%
Std Dev	8.51%	12.17%	17.77%	14.70%	2.55%	3.11%
Sharpe Ratio	0.8	0.84	-0.4	0.19	2.64	1.95

Source: CSFB/Tremont

allocation within hedge funds, just as predictability in traditional asset class returns provides a theoretical grounding for tactical asset allocation.

However, one needs to be very careful about applying the same mean-variance efficient frontier approach to hedge funds in attempting to optimize portfolios at the fund of funds level, perhaps most importantly with macro as the strategy that offers greatest potential from diversification and low correlation. Fung and Hsieh (2001), Agarwal and Naik (2001) and Amin and Kat (2001) demonstrate the option like nature of hedge funds. But options have asymmetric returns and hence mean-variance analysis will fail to capture skewness and kurtosis; portfolio construction analysis based on correlations will fail to distinguish between co-returns and co-movements and most importantly assumes linear dependence. As L'habitant («Hedge Funds- Myths and Limits», 2003) says «when looking at the mean and variance of our distributions (or at the Sharpe ratios), we overlook the fact that the risk variation is not symmetrical, so that volatility does not present the whole picture… Mean-variance analysis is myopic to aspects of the returns distribution beyond mean and variance». R. McFall Lamm («Asymmetric Returns and Optimal Hedge Fund Portfolios», Journal of Alternative Investments, 2003) concludes that the incorporation of asymmetry produces significantly different hedge fund portfolios when we understand that various hedge fund strategies have negative skew and excess kurtosis. Similarly, when constructing macro portfolios, particularly those with a fixed income focus which exhibit higher degrees of leverage, and in which returns can be attributable to receiving liquidity or risk premiums, the potential impact from a naïve mean variance, correlation based analysis can be enormous, particularly in extreme environments of risk dislocations in the market and illiquidity.

Given short track records, these features also have important implications for manager selection. Whereas three years of positive returns could indicate a high confidence of a manager's ability with a normal distribution, the required period for a similar degree of confidence with skewed distributions exhibiting excessive kurtosis can be much longer.

Dispersion of returns

The last year has also witnessed an increase in the dispersion of returns within european based macro funds. We could think of it as a Gini coefficient for macro returns looking at the composition of returns in the index, which would show

a greater dispersion around the mean in the last year. The challenge is to identify the reasons for this, so as to inform future allocation selections and strategy allocation decisions. We can start with the observation that the majority of european global macro funds have a strong bias in fixed income. 10 year swap rates fell from close to 8% to below 4.5% during the three-year bull market from 2000. However, swap rates were only 20bp different between the beginning and end of 2003, so the strong directional trends or bull markets were absent. Perhaps more important is the increase in risk capital allocated to the fixed income space seeking arbitrage opportunities. The fallout from the LTCM collapse in 1998 was a withdrawal of risk capital as banks cut back their risk taking, cutting proprietary desks and many hedge funds closed down. In the last two years, bank proprietary risk taking appetite, the number of fixed income macro hedge funds and asset growth has increased significantly. This has resulted in smaller deviations from the mean and greater speed of mean reversion in the term structure, hence reducing opportunities and forcing managers to rely more on calling the market and risk management. This year, some funds have managed to succeed in these areas of alpha generation, whilst others have seen their reliance on instrument selection within fixed income to provide risk-adjusted returns as a constraint and have experienced diminishing returns despite the growth in assets.

Macro alpha and sustainability

In terms of trying to provide a definition of the global macro strategy, it can be useful to consider what the potential sources of alpha are and also to place the strategy within the asset management business with reference to the debate about relative and absolute return. There are three sources of potential alpha in macro: 1) asset class selection, 2) instrument selection, and 3) market timing. We might also consider the first two as part of risk management and the third as the ability of the manager to «call the market».

The Bridgewater article certainly suggests that on average (i.e. the index), risk adjusted returns do not seem to justify fees charged; they demonstrate that most hedge funds have a lot of beta embedded in their strategies and returns. With fixed income arbitrage, they point out that funds have, in aggregate, done little more than return the beta of buying illiquid fixed income instruments/structures or are collecting premiums based on mean reversion or selling optionality, which generate skewed risk distributions and kurtosis.

With a strategy trying to generate alpha through instrument selection by applying mean reverting trades (such as LTCM), which at the same time is naturally exposed to extreme events, risk dislocations, illiquid markets and paradigm shifts, the critical question is whether the expected returns warrant exposure to such risks. Much like an insurance company receiving premiums to assume individual un-correlated or diverse risks, or like a bank charging for providing liquidity and taking on more diversified risks from fat tail events, a hedge fund assuming a more concentrated set of fat tail risks must rely on its risk management capabilities and its edge in determining the right price for assuming those risks.

This means the development and implementation of advanced risk and pricing models is important to measure the risks in these complex interest rate products, as is the manager's ability to interpret these in the real world in which no model can be completely descriptive. The recent dispute about model valuations at Goldman Sachs highlighted in the «Risk Magazine» should remind us that this type of risk is important, especially when the size of some hedge funds mean they act as price setters (i.e. liquidity providers) to the street for many derivative and illiquid products and where leverage is frequently used.

Perhaps the ultimate question will be about hubris. There are those who don't know or don't care about the risks they take (a lottery ticket purchaser), those who know they don't know and try to develop risk measurement models to help manage their risks, and those who forget they know they don't know and assume their models are fully descriptive. There are still many lessons from 1998 that global macro as a strategy will have to remind itself of in the future.

The future

In applying ideas of relative and absolute returns strategies to individual subsets of the hedge fund universe, in particular global macro, we can think of pure macro trading as the antithesis of or diametrically opposite to index funds. The strategy is unconstrained, except in terms of the manager's risk parameters, it is opportunistic and could well involve style drift, it can be broad in scope and not specialized, it is the pursuit of absolute and asymmetric returns in which returns depend on the manager's ability to call the markets and manage risk. It is important for the investor to feel confident that the manager understands his sources of competitive edge, that the risk parameters are defined, that the manager has the resources and the operational capability to implement his strategy on a sustainable basis and

remain consistent with these risk parameters.

The growth in macro and the challenges it poses will provide opportunities for those able to stay ahead of the curve, understand the critical elements of the landscape in which they operate, respond accordingly and apply their skills to generate alpha. For more defined or constrained strategies, the question remains as to the impact of reduced opportunities, the amount of risk capital at work, and prices charged. Could this mean that there will be some blurring of the lines between traditional relative return asset management and the hedge fund absolute return approach, and does macro remain in this debate a defined strategy, with a defined universe, be it geographical or product or style? Or does it remain apart as unconstrained and discretionary?

To relate these observations about hedge funds in general and global macro in particular, we can try to anticipate the potential nature of the return opportunities for 2004. 2003 was notable for the significant directional moves in the market with the US-Dollar declining some 13% on a trade weighted basis, stock markets rallying some 25-30% (S&P, MSCI), commodities rallying (8% for GSCI and 17% for CRB) and emerging market stocks and bonds significantly outperforming. Many players are calling for a big bond market sell off, a continued decline in the $ and further performance in Asia and commodities. Perhaps the directionality of the moves will not be as extreme or pronounced as in 2003. But the composition of the moves could be where the opportunities lie. A further decline in the US-Dollar seems likely but its extent could be much less than expected. Instead, the composition of the decline will be much more important and the opportunities larger; perhaps sectoral and country moves will be more pronounced than the strong directional and beta moves last year. Perhaps the long awaited bond bear market will once again disappoint with so much priced into the forward curve until recently and instead the opportunities will be in exploiting term structure and product differences. Significant event risk, geopolitical tensions (terrorism, WTO, G7), US elections, regulatory change and potential change in Asian FX regimes, will also dominate the financial market landscape this year. Paradigm shifts, risk dislocations, break down of mean-reverting processes, changes in risk distributions could also be important to identifying opportunities and applying the best strategies to benefit from them.

Whatever the outcome, the markets will keep us, as well as the rest of the hedge fund industry, on our toes.

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