

# Theta Quarterly Review

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## **Third Quarter 2004**

Theta Capital Management

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## Market Review

### 1. Introduction

Most articles about hedge funds published during the past few months have a negative tone. No doubt, hedge funds' subdued performance this year has contributed to this current of hedge fund bashing in the financial and other press. Although many of these articles were of a highly debatable journalistic (let alone scientific) quality, we do believe that our investors and other interested readers deserve a thoughtful explanation for hedge funds' performance this quarter, as well as a reaction to suggestions that this may be related to the large inflows that hedge funds are experiencing. Therefore, we review third quarter performance figures across the hedge fund universe and conclude that, while returns have indeed been poor in some strategies, they continue to be strong in others. Moreover, market conditions and performance in the suffering hedge fund strategies have already turned for the better in September, October and into November.

### 2. Market Review

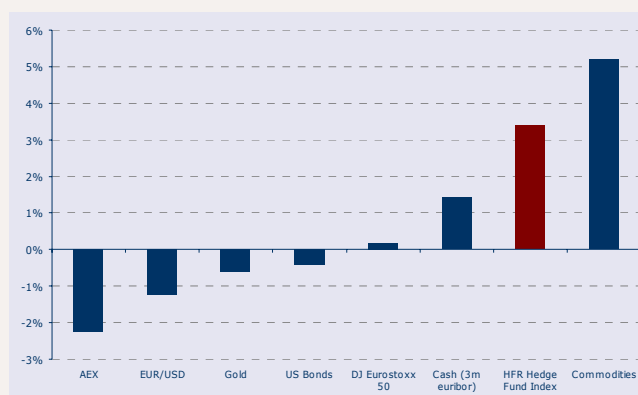
Hedge funds' performance this year has been disappointing to many, especially in strategies that have historically been the best performing areas: Global Macro and Managed Futures. We argue that market conditions in the second and third quarter have not been this difficult in more than a decade. The main detriment to performance of both strategies mentioned above was a complete lack of trend or consistent movement in most financial instruments and commodities. Exhibit 1 below shows that most markets are indeed flat year-to-date:

- Equity markets are trading a tight range, as most of the good news on corporate earnings had already been priced in last year;
- Bond markets are range bound with the Fed tightening monetary policy at its "measured pace";
- Currency markets have been trading in bands until very recently, reflecting uncertainty about how inter-

est rate differentials between the major currencies will look next year;

- Commodity markets performed well but mostly due to a surging oil price (+50% year-to-date);
- Implied volatilities have fallen in most financial markets.

**Exhibit 1 2004 Returns Across Asset Classes**



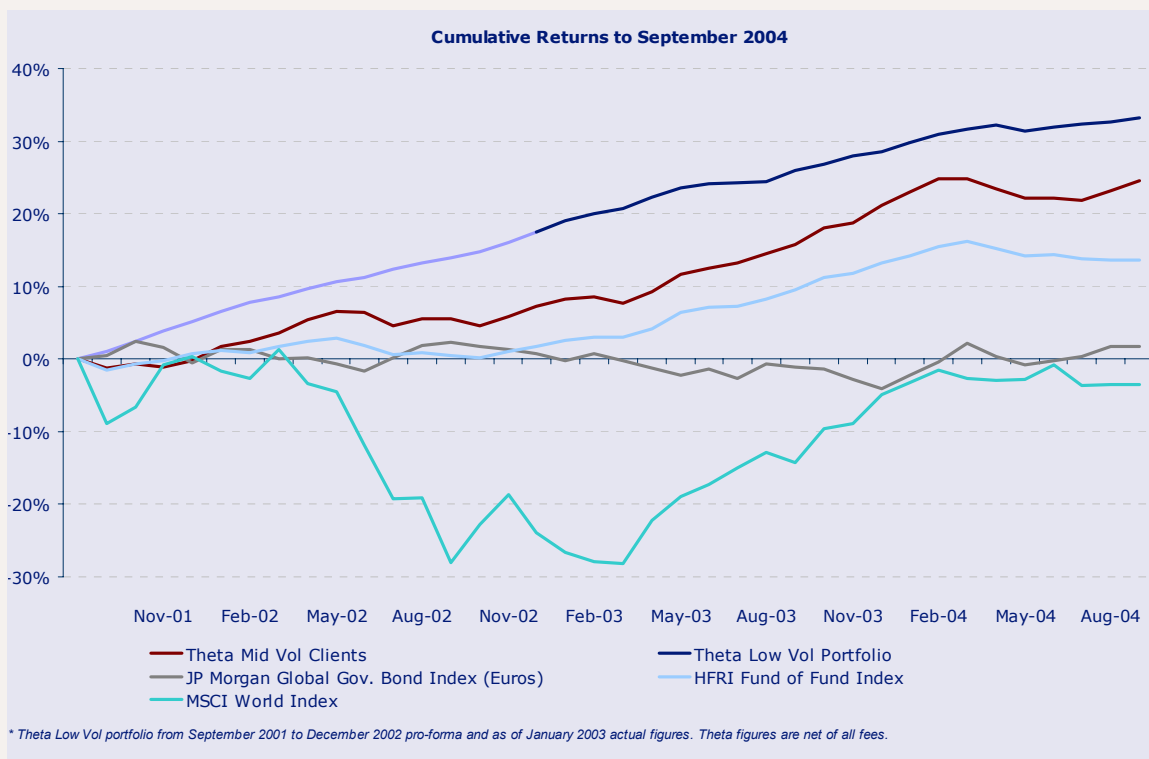
The exhibit also shows that hedge funds are still the best performing asset class year-to-date. Moreover, in line with the premise of delivering absolute returns, they have preserved capital and outperformed cash. Nevertheless, it is clear that there are cyclical factors at play. Whether there is also a structural reduction in investment opportunities for hedge funds is an issue we will touch upon later in this review.

### 3. Portfolio Review

Our **Low Volatility** portfolios continued to perform in line with expectations, generating a net return of +1.18% in the third quarter. With a year-to-date performance of over 4%, they are outperforming all their peers in the Netherlands on a risk-adjusted basis, as well as its own 'benchmark': the HFRI Conservative Fund of Funds Index gained slightly over 2% so far this year.

## Portfolio Review

**Exhibit 2 Performance Theta Capital Management**



Interestingly, over half of the **Low Volatility** performance was generated by directional managers, notably in the areas of credit, distressed debt and long/short equity. In contrast, the ‘pure’ low volatility strategies combined (convertible arbitrage, multi-strategy arbitrage and merger arbitrage) contributed less than 20% to portfolio performance this quarter. Although these traditional arbitrage funds do help in lowering overall portfolio volatility, it is important to supplement them with more directional managers in order to generate positive returns on a consistent basis. Moreover, we believe this is the basis for future outperformance versus our peers.

The **Medium Volatility** portfolios had a more challenging quarter. In the first month, the portfolio

posted a loss of about half a percent, but this was more than offset by a strong rebound in August and September (+1.46%). The larger part of performance came from long/short equity and global macro managers that took sizeable bets on oil and the direction of US interest rates. This also illustrates the character of the portfolios: a large exposure to directional hedge fund managers may hamper returns in directionless markets, but as market volatility increases again and trends return, the portfolios will be able to benefit from this and capture most of the upside. CTA’s as a group continued to have a hard time and did not add to portfolio performance this quarter. In the following section we will elaborate further on CTA’s and their added value to a multi-strategy hedge fund portfolio.

## Strategy Review

### 4. The Added Value of CTAs

Although CTA's in general are not dependent on the direction of broad markets to generate positive returns, they do need sufficient volatility, liquidity and underlying trends (short-, medium- or long-term) in order to find attractive investment and trading opportunities.

Most managers in the CTA universe employ some form of trend following strategy. The aim of trend followers is to see through underlying noise in the market and capture trends, i.e. find the current direction of prices. Since risk management forms a key part of any trading strategy, the system will compensate for many small losses when prices sustain a large trending move: it will 'cut losses' and 'let profits run'.

Trend followers can be distinguished by the duration of their trades; i.e. short-term, medium-term and long-term. The length of the trend determines the relative risk/reward profiles of trend-following systems. Short-term traders aim to capture shifts in market psychologies, cycles caused by current events and wide swings in highly priced and nervous markets. They will enter into a trade on the first strong move after a price reversal, which will result in frequent trades with relatively small losses and modest profits. Long-term trend followers will profit from fundamental market changes, such as seasonality and production cycles. They will stick to a trend as it develops, which results in fewer trades, larger losses but also larger profits.

Although trend followers aim to keep individual losses small compared to profits, these small losses can mount up to one large continuous loss when the market displays a sideways movement. The trading system will frequently reverse from long to short and back again until prices eventually find direction again. As described above, this is exactly what has happened over the last six months. The complete lack of both trends and interme-

diating volatility around these trends posed a challenging trading environment for both types of trend followers. Moreover, although individual short-term traders have very different trading strategies and systems, the lack of volatility had a negative impact on performance across the board. In portfolio perspective, many of the short-term CTA's became highly correlated, thereby drastically reducing the benefits of diversification. Indeed, research at Theta Capital Management has shown that, while short-term CTA's already display relatively high correlation among each other, this correlation increases even further in a challenging market environment such as the recent months.

These findings have made us decide to redeem our short-term CTA managers altogether. We found these funds to add little value to our portfolios in terms of diversification in current markets. For one of our managers, we also found that he had simply grown too big for his strategy; i.e. the mere size of his portfolio made it difficult to employ a short-term trading strategy, generating multiple trades per week. However, we continue to hold positions in long-term trend followers as these tend to have a lower correlation between individual managers, as well as with the rest of our portfolio (notably long-short equity managers). In addition, the risk-return profile of our current long-term CTA managers looks attractive: limited drawdowns are more than offset by the potential for high positive returns (effectively the return profile of a long option position). When markets are not trending, the manager's risk management system will simply reduce position sizes which should limit potential losses. Furthermore, while individual trade risks may be large for long-term trend followers, diversification across trends in different markets is a powerful tool for lowering systematic risk. The underlying notion is that, while trends do not exist in all markets most of the time, they do exist in most markets some of the time.

## Strategy Review

### 5. Convertible Arbitrage Under Scrutiny

Hedge funds account for about 70% of the convertible bond market value in both the US and Europe, according to a recent study by research firm Greenwich Associates. Convertible arbitrage managers tend to employ substantially the same arbitrage, option pricing, and risk management models. More simply put, they all trade the same strategy: long the convertible bond, short the equity, with interest rate and credit spreads being hedged in varying degrees. In addition, convertible hedge funds' holdings are leveraged on average 2-3 times to enhance returns. It is well-known that a convertible arbitrageur's payoff structure resembles that of a short put option position: generating frequent but small positive returns (the option premium), combined with substantially negative but infrequent returns. In popular terms, the arbitrageur gambles dollars to gain a succession of pennies.

This arbitrage strategy works well in normal market environments, but what happens if something forces the funds to reduce exposure, e.g. investor redemptions or an adverse change in margin lending practices? In normal market circumstances, the fund would sell the bonds and cover the equity short position. But if all bonds are held by similar funds pursuing similar strategies, whom will the hedge fund sell to? Traditional "long-only" institutional investors are unlikely to absorb supply in such a sell-off for two reasons:

- The majority of convertible bonds outstanding are high-yield, subordinated bonds that fall outside of their mandate;
- Many convertible bonds have complex option-like features that hedge funds love to trade, but are difficult to price for traditional investors.

So what are the odds of convertible arbitrage managers being forced into liquidation of positions? Below, we

address some potential risk factors: interest rates, credit spreads and investor redemptions.

#### Money market rates

With short-term interest rates at low levels, financing a portfolio with borrowed money to enhance returns is relatively cheap; convertible bond holders benefit from a substantial carry. However, if short rates increase and bond yields hold steady, rising financing costs may exceed the total return from the arbitrage strategy, forcing convertible arbitrageurs to reduce leverage. In short, if leverage is an important return driver, rising short rates are likely to reduce the attractiveness of the strategy.

#### Long-term interest rates

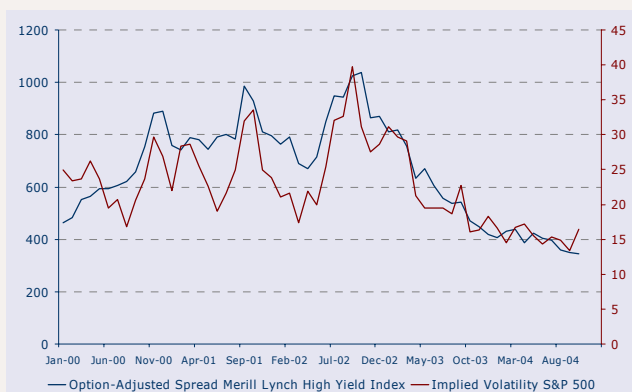
Since many convertibles are currently trading at low delta's (i.e. the conversion option is well out-of-the-money and the convertible is trading close to its bond floor), the sensitivity to changes in interest rates is relatively high. If long-term rates rise (for instance on the back of higher inflation expectations), market values will fall, forcing managers to reduce leverage. We observe that many of our convertible managers are well aware of these risks and have hedged their interest rate exposures accordingly.

#### Credit spreads

Since early 2003, an environment where the Fed lowered interest rates to historically low levels, corporations restructured their balance sheets and consumers continued to spend (partly financed by increased borrowing), investors' focus on being compensated for risk seems to have decreased significantly. Exhibit 3 below clearly illustrates that, in line with the 2003 rally in stock markets, implied volatility has fallen and credit spreads have narrowed considerably, both reflecting strong and positive investor sentiment.

## The Capacity Issue

**Exhibit 3 Credit spreads in bullish sentiment**



An analysis of our own convertible managers shows that most are well aware that credit spreads are at their tightest levels in years and they have adjusted their positions accordingly. In addition, to the extent that a company's bond and its stock are closely correlated, gains on the short equity position may (partly) offset losses on the long bond position.

### Investor redemptions

A potential risk in the convertible arbitrage strategy is the notion that investors may get bored with disappointing returns and may decide to reduce their exposure to convertible managers significantly. In turn, this could trigger a sell-off in the convertible markets. According to Hedge Fund Research, capital inflows into the strategy have come to a halt in the 3rd quarter of 2004, and some convertible managers are already reporting redemptions (albeit of limited size). On the other hand, we anticipate continued strong demand of institutional investors for hedge funds with high risk-adjusted returns. These investors have a 'natural appetite' for managers in the relative value space, of which convertible arbitrage managers form an important constituency.

### The Case for Reducing Exposure

The last point brings us to the issue of capacity. With large blocks of institutional money chasing strategies where opportunities are limited by definition, will returns be attractive enough to warrant an investment in these strategies? In other words, does the premium received still compensate for the risk taken? After having spent considerable time and resources on this issue in recent months at Theta Capital Management, we have drawn the following –tentative- conclusions:

- The relative value space will become very crowded and the availability of arbitrage opportunities is – by definition- limited. This will certainly be the case for convertible arbitrage strategies.
- We expect convertible arbitrage returns to be structurally low in the coming years. Returns will therefore only partly compensate for risks that are still existent (and in some cases have even increased, as noted above);
- The points made above are for a large part also valid for multi-strategy hedge funds, since these tend to allocate a large part of their capital to convertible arbitrage and equity market-neutral strategies. Returns in the latter strategy have been dismal for many years and the strategy is virtually 'dead' (which is why we have never invested in this strategy, despite its extremely low volatility and low correlations to equity and bonds);
- While many of the larger funds of hedge funds are forced –by their predominantly institutional client base- to invest with larger and less opportunistic managers in the arbitrage space, our size enables us to focus on smaller and more flexible managers;
- We find many interesting funds in other strategies that also have low volatility characteristics and at the same time add additional value to our portfolios by means of diversification across types of managers and strategies.

## The Capacity Issue

Based on the arguments outlined above, we have decided to redeem two convertible arbitrage managers and two multi-strategy managers and significantly reduce our exposure to these strategies in both our Low Volatility and Medium Volatility portfolios. However, we will remain invested in two managers that we believe have the skills and flexibility to consistently generate positive returns going forward.

### 6. In Conclusion

Hedge funds have attracted much attention and have gained in popularity in recent years, partly based on their ability to generate absolute returns independent from broad movements in the underlying markets that they are trading. Now that returns have fallen short of expectations so far this year, many are blaming the massive inflows into the industry. In other words, hedge funds are said to have become so large that they are eroding the opportunities they are seeking to exploit. Here, we would like to draw your attention to a forthcoming Theta Research Note on the capacity issue. This paper discusses the impact of large inflows into the industry and whether these have eroded market opportunities for hedge funds<sup>1</sup>. Below, we summarize the main conclusions:

- In areas with deep derivative markets, where hedge funds have been most active using the same trading rules, opportunities are disappearing;
- In equities, the easier opportunities have been eroded: convertible arbitrage and equity market-neutral strategies such as index arbitrage and statistical arbitrage are showing smaller returns;
- Relative value trading in some interest rate markets is becoming more and more complex, as well-known trading rules are becoming less profitable;

<sup>1</sup> Next to our own view, we discuss an excellent report recently published by JP Morgan Research: *Have hedge funds eroded market opportunities?*, October 2004.

- Opportunities remain well alive in areas where there are few hedge funds and the use of derivatives is not yet widespread (credit) or where hedge funds' size is small relative to other market participants (currencies and directional equity strategies, such as long/short equity);
- Investment techniques that rely on proprietary models or that are relatively new, are still generating substantial absolute returns.

Finally, we are proud to announce the launch of the Theta Capital Management website on 1 December 2004. Our objective is to provide a platform for sharing information about our approach to hedge funds investing with investors and all other interested parties. As such, we view it as another milestone in the continuously evolving communication with our clients.

For more information, please contact us at:

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