

## The Opportunity Set for Hedge Funds

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## Introduction

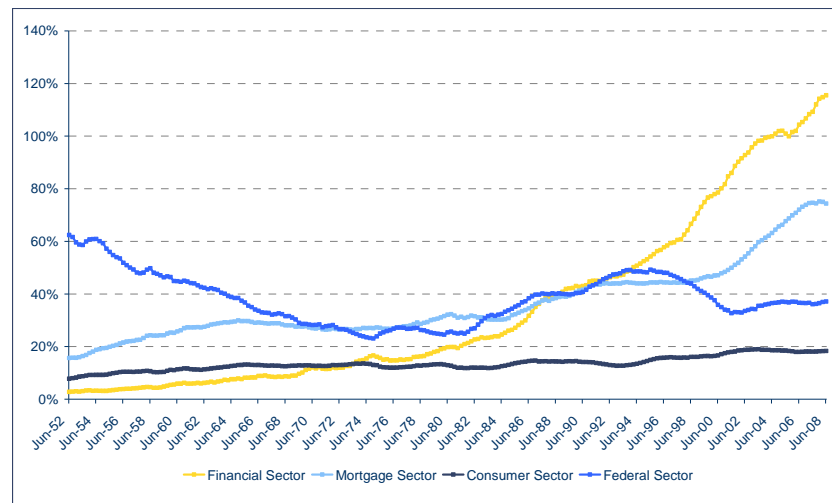
*"The world has been slow to realize that we are living this year in the shadow of one of the greatest economic catastrophes of modern history. But now that the man in the street has become aware of what is happening, he, not knowing the why and wherefore, is as full today of what may prove excessive fears as previously, when the trouble was first coming on, he was lacking in what would have been a reasonable anxiety. He begins to doubt the future. Is he now awakening from a pleasant dream to face the darkness of facts? Or dropping off into a nightmare which will pass away?"*

*He need not be doubtful. The other was not a dream. This is a nightmare, which will pass away with the morning. For the resources of nature and men's devices are just as fertile and productive as they were. The rate of our progress towards solving the material problems of life is not less rapid. We were not previously deceived. But today we have involved ourselves in a colossal muddle, having blundered in the control of a delicate machine, the working of which we do not understand. The result is that our possibilities of wealth may run to waste for a time - perhaps for a long time."*

*John Maynard Keynes, "The Great Slump of 1930" (Dec 1930)*

To appreciate just how pressing the credit bubble has become in predominantly the financial and mortgages sectors of the US economy, just have a look at the chart below. It shows that the debt position of other sectors in the US economy have remained fairly stable over the years (since the early 1950s), whereas the financial sector has truly ballooned since 1990<sup>1</sup>. Also, the mortgage sector's share in the US economy has almost doubled in the past seven years, reflecting a true decoupling of the financial sector from the real economy. The importance of the financial sector for the US economy illustrates the potential impact of the financial crisis on the real economy, something which is happening today.

### US Debt-to-GDP Ratio by Sector



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We believe the implosion of this credit bubble will drastically change the financial landscape going forward and the road towards that change will be bumpy. Indeed, revolutions rarely evolve in an uninterrupted trajectory. One

<sup>1</sup> Note that the cumulative effect of taking Fannie Mae and Freddie Mac and the loans to AIG and Bear Stearns on the balance sheet of the US government doubles the share of Federal sector debt in US GDP to almost 80%. Reflecting a tremendous and historic shift of debt within the US economy, the financial sector's debt ratio falls by the same amount to 80%.

consistent pattern is that, at some point, a manic phase ends in the revolution eating its own children (think banks, SIVs, CDO's, hedge funds...). Moreover, in most historical cases, the world did not revert to the *status quo ante*.

#### Performance Theta Funds

	Q3 2008	YTD 2008
Theta Low Volatility	-7.1%	-6.6%
Theta Medium Volatility	-9.4%	-13.7%
Theta Deep Value	-10.8%	-12.7%

### If you're so smart why aren't you so rich?

In short, we underestimated the impact of the bursting credit bubble on the risk attitude of banks. We had reduced exposure to long-biased funds, we added dedicated short funds in mortgage and corporate credit, most of our underlying hedge funds have drastically reduced gross exposure and some are running sizable cash balances. However, we - and many hedge fund managers - failed to fully appreciate the risk of using any leverage at all (even if used for funding short positions) in an environment where prime brokers are scrambling to reduce exposure to anything that moves.

The collapse of Lehman Brothers has effectively shut down credit markets completely in September. Banks refuse to lend money to corporates and each other. In addition, many prime brokers changed their lending terms to hedge funds overnight and in some cases shut down lending to hedge funds completely. The complete lack of liquidity in most markets forced many funds to take significant liquidity discounts on their positions, even if they have no intention or need to sell.

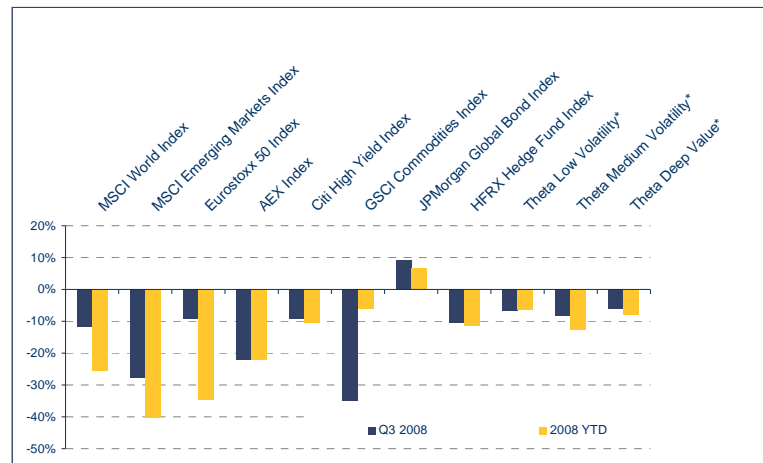
### Risk is a permanent loss of capital

It is important to differentiate between permanent loss of capital (i.e. realized losses) and mark-to-market losses created by extremely illiquid markets. As long as we and our underlying hedge funds are not forced to sell, mark-to-market losses do not translate into realized losses. For example, a back-of-the-envelope breakdown of our 2008 losses into realized and unrealized losses shows that for Multistar Medium Volatility, 70% of the losses are unrealized and for Multistar Low Volatility this number is close to 90%.

Liquidity markdowns on many positions represent an increasingly compelling value that will eventually be realized, as liquidity returns to the market. In other words, we will see prices of many assets revert to the mean or some other notion of value, as we will discuss in more detail below.

We define risk as a permanent loss of capital and are less concerned with month-to-month volatility or returns. We do appreciate that an investor's focus becomes exponentially more short-term oriented during times of stress, but we have accepted the mandate to generate strong absolute returns with a medium-term horizon. We are grateful to our clients that provide us with the stable asset base required to make this mandate work.

## Asset Class Returns



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We have always been very clear about the risk-return profile which can be expected from a diversified portfolio of hedge funds. Analysis of 20 years hedge fund returns yields a very simple rule that, in the medium term, hedge funds generate about 65% of the upside and about 25% of the downside of equities. This means that in extreme market environments, hedge funds can be expected to lose money (especially when liquidity evaporates, as it has done this summer) but significantly less than equities. Looking at the chart above, we see that hedge funds (while often being criticized as both culprit and victim of this financial crisis) largely have lived up to their expectations.

Historically, hedge funds have recovered very sharply following severe equity market corrections. The first column in the chart below shows that hedge funds returned on average -2.5% in the worst three years since 1990. However, the recovery of performance was nothing short of spectacular: +22% on average in the 18 months following the respective worst years. Interestingly, the performance not only recovered strongly in so-called directional hedge fund strategies (which have a higher exposure to equity markets), but also in relative value strategies, such as convertible arbitrage, merger arbitrage and equity market neutral. This shows that the flexible long/short investment mandate of hedge funds allows them to benefit from the enormous dislocations often created by bear markets. Our most experienced hedge fund managers are currently reporting long/short opportunities (from dislocated market segments) without historical precedent. This is why we are extremely bullish on the outlook for hedge fund returns in the coming 2-3 years. Instead of being dependent on a recovery in equity markets, all hedge funds need is the market to trade on fundamentals again (as opposed to technicals and liquidity concerns).

	Average return 1994, 1998, 2002	Average return subsequent 18 months
HFR Fund of Funds	-2.5%	22.1%
MSCI World	-4.5%	26.6%
HFR Equity Hedge	4.6%	44.1%
HFR Emerging Markets	-8.6%	39.9%
HFR Event Driven	1.1%	35.3%
HFR Distressed	1.6%	32.9%
HFR Global Macro	3.1%	23.8%
HFR Convertible Arbitrage	4.4%	22.3%
HFR Relative Value	4.1%	21.1%
HFR Merger Arbitrage	5.1%	20.9%
HFR Equity Market Neutral	4.0%	14.2%

Source: Bloomberg

## So where's the value?

We are not proud to have lost about 12% this year, even though it followed a series of strong positive returns every year since we started managing assets in September 2001. However, we are willing to take some pain if the resulting investment opportunities are as compelling as they are today. Even accounting for a global recession (which we are experiencing today) we believe many risky assets have sold off without any regard to company or sector fundamentals. Our managers are unanimously confirming that many stocks are trading at levels way out of sync with company operating and growth prospects. In addition, the world is experiencing a few secular trends which even this financial crisis can not reverse. These trends include a.o. consumer-led economic growth dynamics in some developing countries and the dramatic shortage of production capacity in natural resources.

In positioning our portfolios for the next 12-24 months, our base case scenario is that equities will be trading sideways without a clear trend but with significant volatility. In addition, there is and will continue to be significant dispersion between prices of substantially similar assets. While we expect little tailwind from a strong recovery in equity markets, there are tremendous fundamental long/short opportunities in equities, bonds and credit and that is where we direct our manager research efforts. However, markets will only start focusing on fundamentals when de-leveraging has fully played out, and this may take weeks or even months. As they say: "in a bear market, yesterday's valuation counts for nothing". That being said, we expect there to be some reversion-to-the-mean dynamics in market segments with extreme dislocations. Prime candidates are debt instruments whose fixed maturity date will act as the catalyst for price reversal (the "pull-to-par" effect). Below we profile a few of these themes.

## Distressed mortgage-backed securities

We have communicated from the outset that we aimed to benefit from the credit crunch in two phases:

- Short positions on the way down
- Long distressed positions when we reach the bottom

While we are not ready to go long across the board, we are seeing tremendous opportunities in specific pockets of the market, most notably in distressed asset-backed securities (ABS) and corporate paper. To illustrate the dislocations in ABS, the table below contrasts current market prices for ABX Index tranches (first column) to their 'fair value' based on the present value of the expected cash flows in different scenarios for house price appreciation (columns 2 to 5). Consensus estimates for house price declines from current levels are 10-15%. This sets the fair value of AAA-tranches between 91 and 100 cents in the dollar, versus a current market price of 50.4 cents (actually, well below 40 cents at the time of writing!); an unprecedented upside potential of 50% without applying any leverage. Interestingly, the lowest tranches (BBB-, which are most exposed to losses in the underlying pool of mortgage loans) have very little upside potential, regardless of house price developments. This reflects an extreme dislocation created in the past year by forced selling of banks and other leveraged investors. They sold what could be sold: the most liquid AAA-tranches. Note that losses in the underlying mortgage pool can be as high as 25%, before the senior tranches are impacted. This makes buying senior ABS tranches even more compelling from a risk-return standpoint.

We have identified several hedge fund managers with the credit skill set, infrastructure and sourcing capabilities to capture this value, almost exclusively in individual mortgage backed securities (MBS) and CDO's linked to MBS. Spilling over from the US mortgage sector, opportunities also arise in the market for consumer finance (credit cards and auto loans). Our portfolios already have moderate allocations to this strategy and we expect to increase exposures going forward (mostly in Theta Deep Value and Theta Multistar Medium Volatility, because of the risks involved).

**Figure 1. ABX 07-02 Price vs Fair Value Scenarios**

	Market price	Cash Flow PV of 2008-10			
		House Price decline			
		-50%	-30%	-20%	-10%
<b>S. Senior</b>	55.5	52.5	78.7	91.9	98.5
<b>AAA</b>	50.4	49.7	69.9	91.9	100.3
<b>AA</b>	11.4	9.4	11.8	14.2	32.4
<b>A</b>	8.3	8.2	9.5	9.6	11.4
<b>BBB</b>	5.9	6.3	6.9	6.9	7.5
<b>BBB-</b>	5.8	5.4	5.8	5.8	6.2

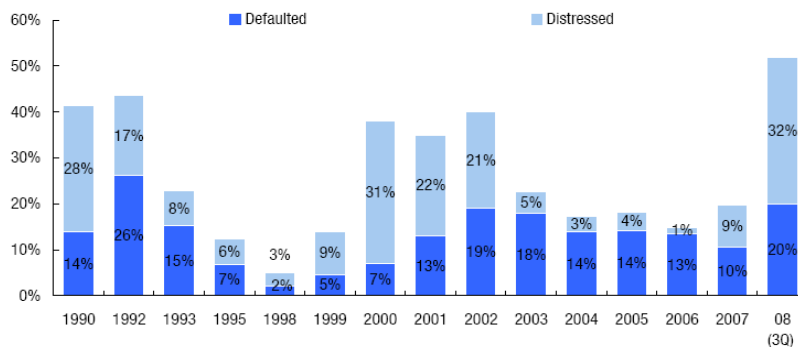
Source: Citi.

### Distressed corporate debt

Another area with tremendous opportunities is distressed corporate debt, including convertible bonds. The chart below shows that more than half of the \$1.3 trillion US high yield market is now trading at distressed or defaulted levels; the highest level in the past 20 years. Credit selection is key here, as corporate default rates are only now starting to increase. Corporate credit spreads are already pricing in default rates well above 10% in the coming

years. However, this cycle will be dramatically different than previous ones, as we have never turned the credit or economic cycle with so much leverage in the system. As a consequence, while default rates may be similar to previous cycles, recovery rates will be considerably lower.

**Figure 17. Defaulted and Distressed<sup>a</sup> Debt as a Percentage of Total High-Yield Plus Defaulted Debt Market,<sup>b</sup> 1990–3Q 08<sup>c</sup> (Including LEH Bond Defaults)**

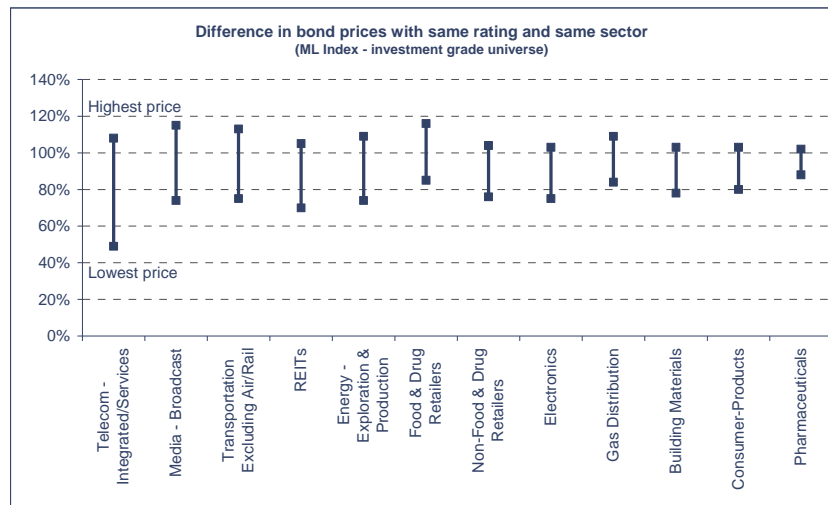


<sup>a</sup> Defined as the option-adjusted spread greater than or equal to 1,000bp over comparable duration Treasuries. <sup>b</sup> \$1,373 trillion as of September 30, 2008. <sup>c</sup> Some years not available as no estimates attempted. Source: NYU Salomon Center.

In terms of timing, we believe the best time to increase allocations to this strategy is when the cycle turns; i.e. when default rates peak and the economy bottoms out (which happened in the summer of 2002 in the previous cycle). Clearly, we are not there yet. Defaults so far are mostly due to refinancing problems; the impact of the real economy on corporate profit margins has yet to materialise. While we already have allocations to this strategy, we are currently finalising our due diligence process for a broad range of distressed debt/credit managers. All of these managers have a strong track record of distressed investing across multiple credit cycles, based on fundamental credit research and strong trading and debt restructuring skills. Also, we focus on hedge funds with a multi-strategy approach to credit investing, to fully exploit the opportunities across a broad range of credit classes: high yield, investment grade, real estate, CDO's, CLO's, bank loans, convertible bonds.

Besides the long-biased opportunities discussed above, credit markets offer tremendous opportunities for long/short managers with fundamental credit selection skills. The chart below shows the average price difference between comparable bonds within the same industrial sector and with the same credit rating (all in the Merrill Lynch investment grade bond universe, excluding financials). In its extreme, a good fundamental long/short credit manager can, by going long the bond with the lowest price and short the bond with the highest price, generate a return of about 60% without applying any leverage (see first bar in the chart)! As we understand it, an average price dispersion of 20-30 price points between substantially similar securities is unprecedented in the investment grade universe.

### Dislocations in Investment Grade Credit



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### Market volatility and macro-economic imbalances

We expect markets to continue to be volatile going forward and have positioned for this by allocating to volatility traders and commodity traders. While allocations are still moderate, the positive contribution to performance for all these funds has already been significant, partly due to their bearish (short) positions in oil, metals, and soft commodities. In addition, we are actively researching several global macro managers that we believe should be able to capture opportunities arising from the global macro-economic imbalances we are witnessing today. These imbalances present themselves in the relative pricing of many tradable asset classes such as equities, bonds, inflation, currencies, and commodities; the playing field for fundamental discretionary global macro managers.

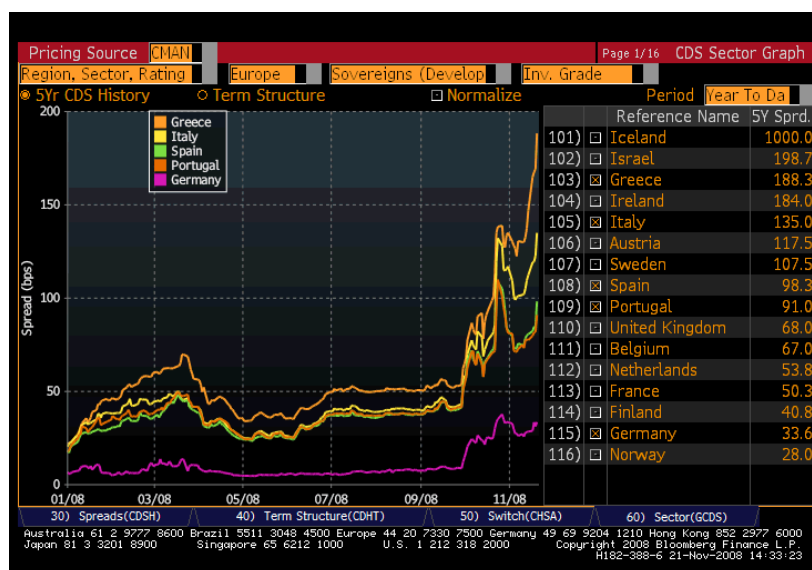
One salient feature of the current period is the increased involvement of government in the economy. Government action has so far been confined to the financial sector, but as the financial crisis spills over to the real economy, we also expect governments across the globe to shift their focus to the consumer and corporate sector. One of our hedge fund managers calls this the 'bull market in politics'. A buoyant economy generally leads to further market liberalisation; financial or economic crisis generally leads to more regulation as the perception that the market has failed gains ground. Examples of this government intervention are: efforts to re-capitalize financial institutions, regulation, and protectionism. Clearly, one of the most destructive government measures was the ban on short-selling in September, which had dramatic implications for market liquidity. The fact that government behavior is, by definition, difficult to predict makes the current market environment

extremely difficult to navigate, which is further compounded by geopolitical pressures<sup>2</sup>.

Global macro managers explicitly incorporate government action into their investment decision-making framework. A good example is the European divergence trade, to which we have allocated in Theta Deep Value Fund and Theta Multistar Medium Volatility. We have invested in two funds that are short the government debt of Portugal, Italy, Greece, Spain (the PIGS countries), Hungary, Romania (through credit default swaps). The main thesis when structuring this trade in November last year was based on (the limits of) government policy.

These countries would see their already weak fiscal position worsen further due to the credit crunch while the single European currency would prevent individual countries from printing money. Now, with both European and the US governments spending enormous sums of money to recapitalize their banking systems, the financing needs of the US may actually 'crowd out' European debt issuance. European countries will be able to attract new capital but at significantly higher risk premiums. The chart below shows how successful this trade of shorting 'weak' countries in Europe has been this year.

Credit spreads on European government debt



Source: Bloomberg

## Recovery of financial institutions

A 'deep value' opportunity in developed equity markets (albeit a risky and potentially volatile one) is the recovery of financial institutions. Large scale banking recapitalisations are underway, led by governments across the globe. With credit and investment risk currently being underwritten by the taxpayer and governments taking board seats, the financial landscape has changed dramatically. Banking will be a different business going forward and most likely a substantially less profitable one than in the past. That being said,

<sup>2</sup> In a sense, government action is *external* to financial markets as decisions are driven by political rather than financial or profit maximisation motives.

some bank stocks have been beaten so hard that the savvy investor with fundamental credit skills and available cash should be able to generate outsized returns in this sector. For Theta Multistar Medium Volatility and Theta Deep Value we have made allocations to this strategy with a highly experienced manager in this sector.

### **Cash is king in emerging markets**

Within emerging markets, we realize that the bull market of the past six years is over and will not likely return soon. Many emerging markets are currently experiencing rapid economic downdrafts due to a combination of lower exports, falling commodity prices, difficult external financing conditions and weakening consumer growth. It is now clear that the de-coupling of emerging stock and bonds markets from global markets was just another version of the “this time it’s different” argument that has characterized the final phase of asset bubbles throughout financial history. That being said, many stocks are now trading below 2 times earnings or even at a discount to the cash on the companies’ balance sheet. In other words, some stocks are trading at a negative price earnings ratio if you were to strip out their cash position.

The key here is to focus on domestic growth themes that benefit from the fact that consumers in the Middle East and China are far less leveraged than in the West. In addition, many emerging market economies have a far greater ability than their Western counterparts to stimulate growth through expansionary fiscal policy in areas such as infrastructure spending (similar to how China spent its way clear of a significant slowdown after the 1998 Asian crisis). We believe China is willing and able to do it again: it has about \$2 trillion of central bank reserves, both the government and private sector are almost debt free, and China recently announced a \$600 billion stimulus package.

### **Conclusion**

In this Quarterly Review we have endeavored to share with our investors the opportunities we see for hedge funds, notwithstanding the extremely treacherous market environment. Whilst we have not been able to escape the tsunami which went through the financial markets in recent months, we are confident that our current portfolios will recover strongly and perform in line with their mandate once markets show only a modicum of stability.