10 Reasons to Invest in CTA Funds

- The Tide is Turning in Favour of CTAs Again

Executive Summary

Over the last four to five years, risk premium investments such as equities, credits and government bonds have experienced phenomenal returns. Over the same time period, the performance of CTA^1 /managed futures funds has been quite lacklustre. However, some bullish signs are now emerging for CTAs. There are five strategic reasons and five tactical reasons for increasing your allocation to CTA funds at this point in the cycle.

Strategic Reasons for Owning CTA Funds

- 1. CTAs Boost the Sharpe Ratio of Client Portfolios
- 2. CTAs Reduce the Drawdowns of Client Portfolios
- 3. CTAs Use a Scientific and Systematic Investment Approach
- 4. CTAs Apply Modern Risk Management Techniques
- 5. CTAs are Liquid They do not Gate Clients

Tactical Reasons for Increasing Your CTA-Allocation

- 6. New Normal is Gone Bubbles and Trends are Back
- 7. Rally in Risk Premiums May Soon Come to an End CTAs are cheap vs Equities
- 8. US Quantitative Easing Coming to an End
- 9. Investors Seem to Underestimate the Geopolitical Risks
- 10. CTAs do Well When Market Volatility Increases

When it comes to deciding in which CTA fund(s) to invest, we think there are good reasons to consider SEB Asset Selection.

SEB Asset Selection:

- a) Top 3 Sharpe Ratio among the World's 16 Largest CTA Funds (on a stand-alone basis)
- b) Top 1 Excess Return to Worst Drawdown Ratio (in client portfolio context)
- c) 100 Percent Stable Investment Team since 2003
- d) Fair and Attractive Pricing
- e) Consistent Investment Style and Explicit Risk Targeting

In summary, there are ten good reasons to consider an increased allocation to CTAs/managed futures funds at this point in the cycle. You may want to take a closer look at SEB Asset Selection, which has not only delivered high risk-adjusted returns since inception, but also demonstrated high quality on other parameters as well.

Hans-Olov Bornemann Portfolio Manager & Head of Global Quant Team



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Fund

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Important Information: Unless otherwise stated, all numbers and graphs are shown net of fees and with SEB Investment Management AB as the information source. The fund is registered in Luxembourg and supervised by the CSSF. More detailed information can be found in the prospectus, simplified prospectus / the Key Investor Information Document (KIID), the fact sheet of the fund and/or through your SEB sales contact. There are no guarantees associated with an investment in the fund. No assurance can be given that target returns, target risks and/or currency hedges will be achieved. The value of your investment may rise as well as fall. Past performance is not necessarily indicative of future results. Given the risk level of the fund, your investment horizon should at least be 3–5 years. *Please see the Disclaimer at the end of this document*.



10 Reasons to Invest in CTA¹ Funds

Background

When the commodity futures market was established in the USA in the 1850s, farmers (with a desire to hedge the future price of their crop) and merchants (willing to assume those price risks) were the only ones trading futures contracts. Later on, futures were created for equity indices, government bonds, currencies, short interest rates etc. Futures traders, who once focused solely on commodity futures, started to take advantage of the diversification benefits from trading futures in multiple asset classes. External investment vehicles were launched and the managed futures fund was born. Due to the historical connection, however, those funds are still referred to as CTA funds ('commodity trading advisor'). We use the two terms, CTA and managed futures, as synonyms. The managed futures strategy is the second largest hedge fund strategy globally (June 2014). Managed futures funds have in total \$320bn in assets under management, which corresponds to 12 percent of the global hedge fund industry's AUM².

What is a CTA/Managed Futures Fund?

There are more than 2,000 CTA/managed futures funds in the world and they come in many in different flavours. Most of them share the following attributes, however:

Portfolio Structure

CTAs generally have a base portfolio that looks like a money market fund. This part of the portfolio aims to generate the risk free rate of return. On top of this portfolio, there is an overlay portfolio that consists of long and/or short positions in futures contracts. This part aims to generate the excess returns.

Universe of Instruments

Most CTA funds use 50-150 futures contracts and have a global multi-asset approach. Futures on government bonds, short interest rates, equity indices, currencies and commodities are the most commonly used futures instruments. Most of the aforementioned futures are very liquid.



Management Style

The research approach of CTA/managed futures managers is based on science and statistics. Identified market inefficiencies are exploited in a systematic way via a set of guantitative/mathematical models. The models not only decide whether to take a position in a specific futures contract and whether the position should be long or short but also how big the position should be. The frequent rebalancing of the portfolio (daily for many CTAs) implies a very active fund management style. Diversification is achieved by taking positions in multiple asset classes, by using multiple instruments within each asset class, by using multiple forecasting factors/models and by dynamically shifting between long and short positions (avoiding a permanent directional bias). CTA managers try to make money as often and as much as possible without paying attention to any benchmark index. They are targeting absolute returns.

Strategy / Alpha Generation

The largest CTA managers focus on medium to long term trend following. They strive to exploit the phenomenon of auto-correlation in the financial markets. The autocorrelation in returns is caused by investors' herd behaviour, economic cycles and central bank intervention.

Performance Characteristics

The long term average correlation between managed futures funds and equities tends to be within a band of +/- 0.20 (same range for bonds). Their correlation to equity market *volatility* tends to be positive over time and they tend to be able to generate positive performance during longer lasting bear markets.

With the above as a quick background on the CTA/managed futures product, it is now time to take the client perspective for the remainder of the discussion.

What are Investors Looking for?

Investing clients are a diverse group in terms of portfolio size, risk preferences and experience. However, it is probably fair to say that most investors include the following two points in their decision making process when considering different investment opportunities:

Capital Growth

Investors aim to generate as high returns as possible over their chosen investment horizon (short / medium / longer term horizon).

¹ In this document, the expression 'commodity trading advisor' and/or the abbreviation 'CTA' are used <u>only</u> as a general description of a) the type of investment strategy pursued in the management of the SEB Asset Selection fund and/or similar funds, or b) fund managers pursuing such strategies. Accordingly, the term shall <u>not</u> be understood to indicate any regulatory or legal characteristic of SEB Asset Selection, its fund management company or any of their affiliates or corresponding entities of other funds pursuing similar strategies.

² BarclayHedge.com website.

Capital Preservation / Downside Protection

Investors are well aware of the pain and problems that financial losses inflict. Therefore, they strive to minimise the magnitude and duration of drawdowns from the alltime-high value of their portfolio.

In fact, a large number of investors combine the two objectives into one objective and try to maximise *the risk-adjusted return of their portfolio* (given the risk level they have chosen). Many professional investors use a variant of the Sharpe³ ratio as the measure for risk adjusted returns, but there are also a lot of investors who try to maximise the portfolio returns (or excess returns) in relation to the expected maximum drawdown of the portfolio.

Having a clear objective is essential as a first step. The next step is to fill the client portfolio with attractive investments.

Attractive Investments

Given the investor's ambition to maximise the risk adjusted returns of his/her portfolio, an attractive investment can be defined to be an investment that:

Boosts the Sharpe ratio of the client portfolio:

This can be accomplished by choosing investments that generate high excess returns and/or have a low (preferably negative) correlation to the client portfolio.

Reduces the drawdowns of the client portfolio:

Investments that reduce the size of client portfolio drawdowns are very attractive. The same is true for investments that reduce the duration of drawdowns.

• Maintains its investing style over time:

You do not want to invest in a fund that suddenly shifts its investment strategy, e.g. which starts to take positions in areas where the fund manager has limited expertise or starts to use instruments which may behave very differently.

Applies modern risk management techniques:

Modern risk management techniques enable fund managers to stick to certain risk limits, to achieve a prespecified volatility target and to obtain a more optimal position sizing and risk diversification between single instruments and between asset classes.

- Excess Return = Return above the Risk Free Rate
- Volatility = Standard Deviation of the Portfolio Returns



Provides good liquidity:

An attractive investment is an investment that at any time allows you to enter and/or exit without causing substantial market impact/losses when buying or selling illiquid instruments.⁴

Whether an investment is good or bad cannot be judged on the basis of the investment's stand-alone performance statistics. All potential investments need to be considered and evaluated in the context of the client portfolio. An investment that on a stand-alone basis may have a high Sharpe ratio, but also a high positive correlation to the client portfolio may not be worthwhile including into the client portfolio. However, an investment that has a lower Sharpe ratio, but a clearly negative correlation to the client portfolio, may be a fantastic addition to the client portfolio.

5 Strategic Reasons to Invest in CTA Funds

At the end of 2001, the global CTA/managed futures industry ran a total of \$41 billion. Since then, the AUM in the industry has grown by almost 18 percent per annum.

Figure 1: Global AUM in CTA Funds (in \$bn)



N.B. Global Assets under Management in CTA funds at the end of each year (for 2014, the end of July AUM has been used). Source: Barclay Hedge

It is time to explain why CTA/managed futures funds have become so popular among the largest pension funds and sovereign wealth funds of this world.

³ Sharpe Ratio = (Annualised Excess Return of the Client Portfolio) / (Annualised Volatility of the Portfolio).

For a detailed description, see William Sharpe's article "The Sharpe Ratio", 1994.

⁴ If you from the very beginning agree to lock up your money for a specific period of time in an illiquid investment like private equity, physical real estate or infrastructure investments, that is of course also acceptable. But you do not want to be in a situation where seemingly liquid investments all of a sudden turn very illiquid (e.g. when everybody wants to exit the investment simultaneously or during a financial crisis). Those types of situations tend to cause large losses for investors.



1. CTAs Boost the Sharpe Ratio of Client Portfolios

CTA funds have historically been able to demonstrate an ability to deliver positive returns during periods when traditional assets such as equities have generated negative returns. By complementing their portfolio with investments in one or several CTA funds, investors have historically been able to boost the Sharpe ratio of their portfolios.

For a typical pension fund with 50 percent of the capital invested in equities and 50 percent in bonds, the lion's part of the *portfolio risk* (approx. 80 percent) is attributable to equities. The key to boosting the Sharpe ratio of a traditional client portfolio (the same applies to a fund of hedge fund portfolio), is therefore to look for investments that over time generate excess returns but have a low, preferably negative, correlation to equities and other risky assets.

In the below analysis and simulation, we focus on the fit between equities and systematic CTA funds. The long term performance development of the global equity market (measured via MSCI World Equities Total Gross Return index in USD, "MSCI World") is probably known to most investors. The longer term performance development of managed futures funds tends not to be that well-known, however. To capture systematic (non-discretionary) CTA managers, we will use BarclayHedge's index "Barclay Trader Indexes Systematic in USD" and will refer to it as the "Barclay CTA index".

A 50/50 portfolio consisting of MSCI World & Barclay CTA index shows a clearly smoother development pattern than MSCI World on its own.





N.B. Period: Dec 1986 – July 2014. The 50/50 Portfolio is a simulated portfolio containing a 50 percent weight each in MSCI World Equities Total Gross Return index in USD and Barclay Hedge Trading Indexes Systematic USD ('Barclay CTA index') applying monthly rebalancing without transaction costs. Source: Bloomberg & SEB Investment Management AB.

When looking at the performance statistics, one realises that the 50/50 portfolio is superior to MSCI World on all measures. The annualised return of the 50/50 portfolio is higher (8.7 percent vs 8.3 percent for MSCI World), the realised volatility is lower (10.1 percent vs 15.6 percent for MSCI World), the worst drawdown is smaller (-25.2 percent vs -53.7 percent) and the risk adjusted returns (Sharpe ratio and Excess Return / Max DD) are clearly higher than for MSCI World.

Figure 3:	Equities + CTA	Funds = Impro	oved Statistics
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		Excess				ExcRet/
	Return	Return	Volatility	Max DD	Sharpe	Max DD
MSCI World	8.3%	4.0%	15.6%	-53.7%	0.25	0.07
Barclay CTA	8.1%	3.8%	13.3%	-22.1%	0.29	0.17
50/50 Portfolio	8.7%	4.4%	10.1%	-25.2%	0.44	0.18

N.B. Period: Dec 1986 – July 2014. The 50/50 Portfolio is a simulated portfolio containing a 50 percent weight each in the MSCI World Equities Total Gross Return index in USD and Barclay Trader Indexes Systematic USD ('Barclay CTA index') applying monthly rebalancing without transaction costs. Return = Net Return after management and performance fees for Barclay CTA, but gross of fees and taxes for MSCI World. Excess Return = Net Return minus the return on 3 month US T-Bills. Max DD = Worst drawdown (percentage decline from the all-time-high value) over the period. Sharpe ratio = Excess Return / Volatility. ExcRet = Excess Return. Source: Bloomberg & SEB Investment Management AB.

By helping clients boost the upside potential and simultaneously reduce the downside risk, the CTA industry has earned the trust of many institutional investors around the world. As opposed to global macro funds, which make their decisions on a discretionary basis, CTA funds pride themselves of being 100 percent systematic and disciplined in their research- and investment process.

2. CTAs Reduce the Drawdown of Client Portfolios

Why are CTA funds able to bring such positive diversification effects to equity portfolios? Part of the answer can be seen in the below graph. During the five worst drawdowns of the MSCI World index since 1986, the Barclay CTA index delivered *positive* returns! This characteristic has made investors talk about CTA performance as "crises alpha" or made them refer to CTA investments as a 'tail risk hedge', as an investment that protects a client portfolio against very negative outcomes.

Figure 4: The Five Worst Drawdowns of MSCI World



N.B. Period: Dec 1986 – July 2014. Barclay CTA = Barclay Hedge Trading Indexes Systematic USD. MSCI World = MSCI World Equities Total Gross Return index in USD. Source: Boomberg & SEB Investment Management AB.

The performance of CTA funds during the five worst drawdowns of MSCI World should not be taken as a guarantee that CTAs are able to deliver positive returns during *all* equity market declines. In a number of cases, CTA funds also lose money when the MSCI World index declines.

However, it has been a rather rare situation that the 50/50 portfolio has been in a larger drawdown than the MSCI World portfolio since 1986. The 50/50 portfolio managed to protect the downside much better than MSCI World during the severe bear markets of 2000-2002 and 2007-2008.





N.B. Period: Dec 1986 – July 2014. Barclay CTA = Barclay Hedge Trading Indexes Systematic USD. MSCI World = MSCI World Equities Total Gross Return index in USD. Source: Bioombera & SEB Investment Management AB.

The long/short positions, the frequent portfolio rebalancing activities and the trend-following nature of CTA funds give them an unusual performance development over the longer term. CTA funds' low, or even negative, correlation to equities over time makes them very attractive for investors who strive to maintain a well-balanced portfolio.

3. CTAs use a Scientific and Systematic Approach

One of the great advantages of CTA funds is that they are run in a scientific and systematic manner. This means that investment decisions are not affected by the temporary gut feeling or the current emotions of a stressed fund manager. It also means that CTA managers take positions based on their scientific research of financial markets and the results of statistical tests. Models are constructed to take advantage of identified market inefficiencies in a systematic manner. These models are typically fed with new input data on a daily basis, in some cases even intra-day, and positions are taken based on the return forecasts, probabilities and/or digital signals. A model's ability to generate excess return is continuously followed-up and evaluated.

The best discretionary fund managers are also very systematic and unemotional in their approach. However, to block out human emotions such as greed, fear and loneliness, you need to be rather inhuman. Very few people feel comfortable taking a different path than the crowd, especially after they have tried it once and been punished for doing so. Also, because humans already at birth are provided with an large dose of hope and optimism, they find it difficult to make unbiased forecasts. CTA managers build investment models that do not suffer from this weakness. The ability to produce unbiased forecasts has historically helped CTA funds to deliver positive returns in *both* bull and bear markets.

4. CTAs Apply Modern Risk Management Techniques

CTA managers' affection for mathematics and statistics puts them in a class by themselves when it comes to constructing and utilising modern risk management tools and techniques. In fact, due to the shortcomings of many off-the-shelf risk management systems, CTA managers tend to build their own risk management systems.

Modern risk management means that you do not diversify your portfolio on the basis of the capital invested in different assets (25 percent of the portfolio capital in each investment A, B, C and D), but rather on the basis of the risk that the different investments are contributing with (for example 25 percent of the overall portfolio risk allocated to A, B, C and D, respectively). Modern risk management also implies that you are targeting a pre-specified volatility for your fund over a certain period of time and that you do not let changes in market volatility affect the portfolio volatility other than on the margin. In other words, it is possible to calibrate a CTA fund to run with a pre-specified volatility over time. Modern risk management means you only take a position (take on risk), when you have the odds on your side (rather than having a constant level of exposure/risk in the portfolio at all times). Finally, modern risk management of course means that you apply pre-specified limits on how much risk and/or exposure you should be allowed to take in particular instruments, sectors or asset classes and for the fund overall.

5. CTAs are Liquid – They Do Not Gate Clients

It was proven during the most recent financial crisis in 2008 that CTA funds kept their promise of handing back money to their clients when clients wanted to redeem from the fund.

CTA funds probably represent the most liquid type of investments among all available fund categories. There are four reasons for this: i) CTA funds tap into all the liquid asset classes that exist (equities, fixed income, currencies and commodities) rather than just one or two of these asset classes, ii) CTA funds invest on a global rather than regional basis, iii) CTA funds use futures contracts in their position taking and the futures markets are among the largest and the most liquid markets in the world, and finally, iv) if the liquidity in a particular futures contract ever dries up, arbitrageurs would create new liquidity by taking off-setting positions in the underlying spot market of the respective instrument. The



superb liquidity, during good times as well as bad, that exists in the instruments that CTA funds trade, enables the managers to offer excellent liquidity terms to their clients.

In addition to the above strategic reasons to include exposure to CTA funds in the client portfolio, there are at least five tactical reasons why clients should consider increasing their exposure at this point in time.

5 Tactical Reasons to Invest in CTA Funds

6. New Normal is Gone – Bubbles and Trends are Back!

Over the last two years, the market has not been characterised by the manic depressive risk-on / risk-off behaviour of the period 2010 – 2012. Instead, the financial markets seem to have returned to a more normal, old normal, behaviour again. We are currently in greed-mode and all the lessons that were learned during the 2008 crises have been suppressed by the desire for yield pick-up and/or yet another year with attractive equity market returns.

Only very important and dramatically surprising events, such as the totally unexpected comments that the former Federal Reserve Chairman Ben Bernanke made in his speech in May 2013, seem to cause large market reversals. Normal kind of news, for example stronger than expected US growth rate at the beginning of August 2014, seem to cause more limited and shorter lived corrections (like markets have behaved over longer periods in the past).

Note that central bank interventions per se are not a problem for CTA funds. In fact, CTAs, like other investors, tend to benefit from such interventions as long as the interventions follow a smoother and more consistent pattern. Consistent behaviour by market participants facilitates the forecasting of future market developments.

7. Rally in Risk Premiums May Soon Come to an End

As we will discuss in a separate white paper, "Time to Reconsider Your Asset Allocation", we believe most, if not all, risk premium investments such as equities, credits, bonds, real estate are highly valued at this point.

As can be seen in the next graph, there seems to be a connection between the Shiller P/E ratio and the *subsequent* 10 year annualised real total return for the US equity market (S&P Composite). The current reading indicates that the annualised real return over the upcoming 10 years, i.e. until 2024, may end up close to zero.

Having said this, one should consider that the 10 year annualised real returns have deviated quite a bit from the respective 10 year forecasts even in the historical perspective. Deviations of +/-5 percentage points have occurred rather frequently. Also, Shiller P/E ratios may overshoot quite substantially before they start to come down again. A Shiller P/E of 25 may become a Shiller P/E of 30-35 as was the case in 1930 or as high as 45, which happened during the internet bubble in 2000. In other words, it is difficult to forecast how big the current bubble will grow before it bursts.

Figure 6: US Equity Market Highly Valued Relative to its History



N.B. Real Total Return (LHS) is pictured on an inverted scale and refers to the S&P Composite index. Shiller P/E (RHS) is the 10 year cyclically adjusted P/E ratio. Source: Homepage of Robert J. Shiller and SEB Investment Management AB.

On the other hand, it is hard to make the case that the US equity market is attractively priced at this level. How reasonable is it to justify equity investments by saying that the valuation level of credit and bonds is unattractive as well? Nobody knows the exact timing of when a bull market will shift to a bear market. However, judging from historical data, a Shiller P/E ratio of around 25 should be taken as a warning.

When it comes to the valuation of the bond and credit markets, yields have dropped to an all-time low level and the valuation risen to an all-time high. This is partly because inflation rates and default rates have fallen and partly because the Federal Reserve, via its quantitative easing programmes, has pushed up bond prices (pushing down yields) and simultaneously flooded the financial markets with unprecedented amounts of cash.





Source: Homepage of Robert J. Shiller



What do investors do with all the cash they receive when the QE bond buying is taking place? The Fed hoped that they would use it for consumption or capital expenditures. However, the typical investors in the bond market (sovereign wealth funds, pension funds, mutual funds, banks and other types of financial institutions) are running other people's money and are not allowed to shift financial investments into consumption. When it comes to capital expenditures, companies have not seen any need to turn their financial investments into physical investments. The demand for their products and services has been lacklustre and they only spend money on capex when they face capacity constraints or must replace essential equipment.

Thus, all these investors have the choice of reinvesting the cash into the financial markets or buying real estate assets. Since they are not so keen on the zero interest rate from cash accounts, T-bills and other short term interest rate instruments, investors are in practice forced by the Fed to buy government bonds and credit instruments at lower and lower yields, with more risk and less liquidity.

In the run-up to the 2008 financial crisis, investors were lured by investment banks and credit rating institutes to buy overvalued and illiquid credit instruments. This time around, it seems that the Federal Reserve and soon also the European Central Bank, knowingly or by accident, are pushing people into the same trap.

In our upcoming white paper, you will find a more in-depth discussion on valuation. Suffice it to conclude here that we think that the current valuation is quite stretched. It seems that the real returns that one would normally expect to get over the next decade have already been received by today's investors.

Another way to get a feel for the attractiveness of the equity market is to look at the historical ratio between the Barclay CTA index and the MSCI World index.



Figure 8: Is the Tide Turning in Favour of CTAs Again?

Period: Dec1986 – Aug 2014. Source: Bloomberg and SEB Investment Mgmt AB.

At the end of August 2014, the ratio between the two indices hit a value of 0.90, in other words, nearly the all-time-low ratio which was reached at 0.88 in March 2000. March 2000 was the peak of the equity market at that time. A two-year bear market followed in 2001 and 2002. CTAs made money, however.

At the equity market peak in 2007, the trough for the Barclay CTA / MSCI World ratio was recorded in May 2007 at 0.96. The MSCI World equity index declined during June, July and August that year. However, the equity market staged a last climb to the final peak in October 2007. After that, the equity market fell like a stone and the CTA index rose like a sun.

Whether the current ratio of 0.90 will once again signal the turning point for CTAs vs the world equity market or not, we do not know yet. However, considering all the other factors we highlight in this paper, we think there is a good chance that the tide may indeed be turning in favour of CTAs again.

8. US Quantitative Easing Coming to an End

As the economic growth- and inflation rate have been coming down to historically low levels over the last decade and a half, central banks have been pursuing aggressive expansionary monetary policies. As mentioned above, the Federal Reserve has not only pressed down the federal funds rate, but has actively pushed up prices of government bonds as well as credit instruments.

Over the same period, the European Central Bank has managed to reassure the market of the long term survival of the euro and to talk down interest rates. These actions have also resulted in an artificially low interest rate environment.

However, because recent economic data for Germany was weaker than expected, the ECB has opened up to the idea of pursuing quantitative easing in Europe as well. In this case, the central bank will focus on buying asset backed securities rather than government bonds. The intervention tries to encourage commercial banks to off-load car loans, consumer credit loans, mortgage and similar loans from their balance sheets via securitisation. After having sold the securitised assets to investors in the credit market, the banks are expected to lend more money to private individuals as well as to small and medium sized enterprises, which, the ECB hopes, a) will be willing to increase their indebtedness even further and b) will spend the borrowed money on consumption or capex.

Instead of generating increased private consumption and higher capital expenditures, the central bank efforts have so far only created asset price bubbles. As long as the financial markets believe that everything will be alright in the end, i.e. that economic growth will resume at some point, that unemployment rates will fall further and that interest rates



will remain at their current low levels, the high market valuations may be sustained for a while. However, sooner or later, due to a geopolitical chock, loss of consumer confidence, loss of trust in central bank interventions or some other reason, there is a clear risk that expectations and asset prices may come down.

QE: Yes/No S&P500 Index 2500 1 0.9 0.8 2000 QF1 QF2 OT OF? 0.7 0.6 1500 0.5 0.4 1000 0.3 QĖ2 ОТ 0.2 500 Spe Exter 0.1

0

Jan 2008

Nov 2008

Sep 2009

Figure 9: Fed's Quantitative Easing vs the S&P 500 Index



May 201

Mar 2012

Jul 2010

0

Sep 2014

Nov 2013

Jan 201

The \$10,000 question right now is how the US bond-, mortgage- and equity market will perform when the artificial asset buying comes to an end. Figure 9 seems to indicate that the withdrawal of the Fed's support-buying might result in a downward pressure on the equity market (and probably also on the bond and credit markets). Should the Fed start to talk about off-loading the bonds and mortgage bonds it has been accumulating over the years, the market reaction would probably be even more negative.

9. Investors Seem to Underestimate the Geopolitical Risks

Europe has not been involved in a significant war for almost 70 years now. Hardly anybody can imagine how psychologically strenuous and economically devastating a war can be. Considering that President Putin, by controlling the message of the Russian media, has managed to make the Russian people keen on invading the Ukraine and to free and protect people of Russian ethnicity from, what they claim to be, fascist government in Kiev, Putin has painted himself into a corner. Considering that the EU and the USA will never accept an open Russian invasion of Ukraine, Europe is facing a considerably larger geopolitical risk than the equity market seems to realise or want to take into account (optimistic bias of human beings). We hope and pray that this geopolitical risk will never materialise, but we also advise our clients to take this risk into account and to position their portfolios in a corresponding way. The political and economic scene may deteriorate very swiftly and very dramatically.

10. CTA Funds Do Well When Market Volatility Increases

The Vix index and the VDax index are trading at very low levels in the historical perspective. Low implied volatilities tend to signal a bullish investor sentiment and a positive economic and political environment.

The performance of CTAs has historically been positively correlated with equity market volatility, i.e. when the equity market becomes more volatile CTA funds tend to make more money than when market volatility is declining.

Figure 10 shows how equities historically have done well when the 12 month rolling volatility for the MSCI World index has been declining. Over the same periods, CTA funds have only generated marginally positive returns. However, during periods when the 12 month rolling volatility has been increasing, CTA performance has been positive while MSCI World (equities) performance has been negative.

Figure 10: Rising Volatility Good for CTAs & Bad for Equities



N.B. Period: Dec 1986 – July 2014. Barclay CTA = Barclay Hedge Trading Indexes Systematic USD. MSCI World = MSCI World Equities Total Gross Return index in USD. The change in volatility of the MSCI World index over rolling 12 month periods plotted against the corresponding 12 month rolling return of Barclay CTA index and MSCI World respectively. Volatility = annualised volatility based on the last 12 monthly returns. Source: Bloomberg & SEB Investment Management AB.

Investors who think that market volatility is likely to rise over the next 12-24 months would have another good reason to consider increasing their exposure to CTA funds.

Figure 11: The VIX Volatility Index at Historical Low [in Percent]



N.B. Period: Jan 1990 - Aug 2014. Source: Bloomberg

At the end of August 2014, the VIX index was recorded as low as 12 percent, i.e. very close the historical all-time lows. Since 1990, the VIX index has only recorded a lower reading than 12 percent in one out of ten trading days. In nine out of ten trading days, the VIX has been higher than 12 percent. In four out of ten trading days, the VIX index has been higher than 20 percent.

Although it is not easy to pinpoint the exact reason and timing, we believe it is fair to conclude that the odds are quite high that the implied volatility of the S&P 500 (and other equity indices) will rise over the next 12-24 months.

CTAs are quite unique in their positive correlation to market volatility. Very few investments can demonstrate this valuable diversification feature and simultaneously generate excess returns over time.

Which CTA Funds Should You Pick?

To avoid the risk of being fooled by well-polished marketing stories, clients may want to read a white paper that we published at the beginning of 2014 called "10 Fallacies to Avoid when Selecting CTA Funds".

CTA Managers (like us) should not give advice about what CTA funds the client should pick. Thus, we leave that job to impartial market participants such as consultants. However, for what it is worth, we can at least try to highlight how we think the SEB Asset Selection funds differ from other CTA funds.

The SEB Asset Selection Funds

a) Solid Track Record

Since inception in October 2006, the SEB Asset Selection fund has delivered one of the highest risk-adjusted returns among the world's largest CTA-managers⁵, both when the funds are compared on a stand-alone basis and, more importantly, when the funds are evaluated in the context of a client portfolio⁶. This can be seen in Figure 12.



Risk-adjusted returns can be calculated by putting the Excess Return in relation to the Volatility (Sharpe ratio) or by putting the Excess Return in relation to the Worst Drawdown (ExcReturn/MaxDD ratio). In a situation where returns are normally distributed, volatility and worst drawdown should be quite closely linked to each other. However, when the returns are not normally distributed, the ratios may differ quite a bit from each other.

Figure 12: Performance Statistics for Major CTA Funds

	Client Portfolio Context		Stand Alone	
	ExcRet/		ExcRet/	
	MaxDD	Sharpe	MaxDD	Sharpe
SEB Asset Selection	0.54	0.72	0.40	0.43
Fund 2	0.52	0.79	0.54	0.49
Fund 3	0.50	0.69	0.31	0.42
Fund 4	0.48	0.60	0.00	-0.01
Fund 5	0.48	0.85	0.67	0.68
Fund 6	0.40	0.54	0.07	0.13
Fund 7	0.36	0.75	0.32	0.39
Fund 8	0.34	0.51	0.07	0.17
Fund 9	0.32	0.60	0.21	0.29
Fund 10	0.32	0.49	0.00	0.01
Fund 11	0.31	0.52	0.08	0.13
Fund 12	0.31	0.54	0.13	0.16
Fund 13	0.27	0.41	-0.02	-0.04
Fund 14	0.21	0.60	0.13	0.20
Fund 15	0.15	0.43	0.06	0.13
Fund 16	0.11	0.31	-0.04	-0.10

N.B. Period: Oct 2006 – July 2014. Risk adjusted returns for major CTA funds since the SEB Asset Selection fund was launched in October 2006. The risk-adjusted returns are calculated both in the context of a client portfolio and on a stand-alone basis. The client portfolio consisted of 1/3 (of the capital) invested in MSCI World, 1/3 in Bloomberg European Government Bonds EUR and 1/3 in CTA Fund X, whose performance series had been normalised on the basis of a 15 percent average volatility (applying monthly rebalancing without transaction costs). Return = Net Return after management and performance fees for the respective CTA fund, but gross of fees for MSCI World and Bloomberg European Government Bonds. Excess Return = Net Return minus the return on 3 month T-Bill rate. Max DD = Worst drawdown (percentage decline from the all-time-high value) over the period. Sharpe ratio = Excess Return / Volatility. ExcRet = Excess Return. The CTA funds that were included in the analysis have been listed in footnote 5. Source: Bloomberg & SEB Investment Management AB.

Glancing through the table, one can see that Fund 5, which quite clearly has the highest ExcReturn/MaxDD ratio on a stand-alone basis is ranked only fifth on this measure in the context of a client portfolio. This indicates that Fund 5 may be running a model which, besides the traditional trendfollowing strategy, also tries to benefit from traditional risk premiums. When the risk premium investments in the client portfolio suffer from drawdowns, Fund 5 has not been able to offset those client portfolio drawdowns as well as some other CTA funds.

⁵ The CTA funds that were included in the study were the following 16 CTA funds: Altis Gobal Futures USD, Aspect Diversified Fund EUR, Boronia Diversified USD, Brummer & Partners Lynx SEK, Campbell FME Large USD, Cantab Quantitative Fund USD, Dunn WMA USD, FTC Futures Fund EUR, MAN AHL Diversified USD, NuWave Combined Futures USD, Ortus Fund USD, Rivoli International EUR, SEB Asset Selection EUR, Transtrend Fund EUR and Winton Futures Fund USD. Funds whose strategy deviated from the mainstream medium/long term trend-followers were excluded. Funds which do not make their performance data publicly available on Bloomberg were also excluded. Major funds that are missing: BlueCrest Bluetrend and Graham (no data on Bloomberg).

⁶ The client portfolio that was used consisted of the following three investments: 33.3 percent in MSCI World Equities Total Gross Return in USD,

^{33.3} percent in Bloomberg European Government Bonds and 33.3 percent in the respective CTA funds, normalised to a 15 percent average volatility.



Fund 4, on the other hand, runs a model which, on a standalone basis, looks uninspiring. However, in the context of a client portfolio, this fund looks quite solid.

SEB Asset Selection comes out among the top 1-4 no matter what risk-adjusted return statistic the fund is evaluated on.

When it comes to the accumulated net return since launch, SEB Asset Selection (which is running at a lower risk than almost all of its competitors) is coming out well ahead of the broader NewEdge CTA Index (20 largest CTAs in the world, SEB Asset Selection is one of them), the NewEdge CTA Trend Sub Index (10 large trend-followers) as well as the Alternative UCITS CTA Index.

Figure 13: SEB Asset Selection versus Major CTA Indices



N.B. Period: Oct 2006 – Aug 2014. The NewEdge CTA Index includes the 20 largest CTA funds in the world. The NewEdge CTA-Trend Sub Index includes Aspect Diversified, Brevan Howard Systematic Trading, Campbell Managed Futures, Eagle Trading Systems, Brummer & Partners Lynx, Man AHL Diversified, Millburn Ridgefield Diversified, Transtrend Enhanced Risk and Winton Capital Diversified, Toget a fully correct comparison between time series expressed in differential between the currencies should be taken into account. Considering that the interest rate differential between USD and EUR has been small over the period, we have chosen to keep the original time series and not made any such adjustments. Source: Bloomberg

b) Stable and Experienced Investment Team

The investment team running the SEB Asset Selection funds, SEB's Global Quant Team, consists of five principals: Team Head Hans-Olov Bornemann (former Managing Director of Deutsche Bank), Deputy Team Head Jan Hillerström, Adam Ahlström Montille, Mikael Däckfors and Matthias Eriksson. The team has been 100 percent stable since its foundation in October 2003. The team is known for its robust forecasting model, its integrated and well-calibrated risk management system and for staying true to classical trend-following rather than drifting into multi-strategy or including long-only equityor bonds positions.

c) Consistent Investment Style

The SEB Asset Selection funds should be seen as *components* that strive to *enhance the risk- and return characteristics of the client portfolio*, i.e. by adding SEB Asset Selection to a typical client portfolio consisting of bonds, credits and equities, the Sharpe-ratio of the client portfolio should increase and the worst drawdowns of the client portfolio should be reduced.

We refrain from the temptation⁷ to maximise the stand-alone Sharpe-ratio of the SEB Asset Selection funds. Instead, we focus on maximising the Sharpe ratio and the Excess Returnto-Drawdown ratio of a typical client portfolio consisting of bonds, credits and equities. The best way to achieve this objective is to focus on capturing trends and to make sure that the models stay unbiased (that they avoid permanent tilts towards risk premiums).

d) Fair and Attractive Pricing

Our Nordic origin shines through when it comes to the pricing of the SEB Asset Selection funds. The flagship fund, SEB Asset Selection (10 percent volatility target) is priced at 1.10 percent management fee and 20 percent performance fee. The performance fee hurdle amounts to the high-water-mark increased by the development of the 3-month T-bill index since the HWM was recorded. Each share class applies a collective HWM / hurdle and crystallizes performance fees on a daily basis. On the above mentioned list price, discounts are offered to clients whose investments exceed EUR 10 million and EUR 100 million, respectively.

e) Client Friendly Product

Unlike many other CTA funds, the SEB Asset Selection funds offer daily valuation (confirmed and definite valuations), daily liquidity (the order deadline for same-day execution is 15.30 hours CET), 100 percent transparent holdings reports on a quarterly basis and detailed monthly reports in four different languages: English, German, French and Swedish.

⁷ There are still some institutional investors who compare and evaluate CTAfunds on the basis of the CTA funds' stand-alone Sharpe-ratio instead of looking at how much the respective CTA funds are able to improve the overall Sharpe ratio of the client portfolio. The analysis required to do it correctly is much easier to accomplish than people think. The only thing that is required is an historical simulation where the client portfolio has been complemented with x percent weight in the respective CTA-funds (one at a time and using a return series that has been normalised with regards to the CTA fund's volatility).



f) Family of Funds – Different Risk Levels Available

The SEB Asset Selection CTA/managed futures strategy is offered with three different risk levels (separate UCITS-compliant funds):

- SEB Asset Selection Defensive (5 percent target volatility)

- SEB Asset Selection Fund (10 percent)

- SEB Asset Selection Opportunistic (20 percent)

SEB Asset Selection is offered in currency hedged share classes for the following currencies: EUR, USD, GBP, JPY, CHF, SEK and NOK.

Current Positioning of SEB Asset Selection

At the end of August 2014, SEB Asset Selection had a forward looking volatility of 7.7 percent, somewhat lower than the fund's long term target of 10 percent.

In equity futures, the fund carried a medium sized net long position (gross volatility contribution of 5.4 percentage points). A medium sized net long position in fixed income futures contributed with 6.3 percentage points. Currency futures (long USD, AUD, NZD and MXN; short EUR, JPY, GBP and CAD) contributed with a low risk (1.7 percentage points) and the fund had no positions in commodity futures (0.0 percentage points). Diversification effects reduced the gross risk by 5.6 percentage points.

The current positioning implies that the fund in the near term would benefit from rising equity markets, rising bond markets (declining yields) as well as appreciating USD, AUD, NZD and MXN. Correspondingly, should we experience a market reversal and the beginning of a bear market in equities and/or bonds, the fund would initially lose some money until the long positions are changed into short positions. For clients who currently have a long exposure to equities and bonds, a switch into SEB Asset Selection would probably not change the characteristics of the client portfolio to any major degree at the current point in time. However, a reallocation into our fund would imply that this part of the portfolio has become dynamic in nature. Instead of holding onto the long equity and/or bond positions and hoping that the markets will always go up, the quantitative model of the SEB Asset Selection fund has been programmed to follow the respective markets up and down with a certain lag. This dynamic feature has helped the fund generate a performance of +9 percent year-to-date (end of August 2014) and also helped the fund to deliver a performance of +24 percent during the financial crises in 2008.

More Information

For more information about the SEB Asset Selection funds, please get in touch with your sales contact (contact details are found at the end of this report) or send an email to <u>GlobalQuantTeam@seb.se</u>.

Hans-Olov Bornemann Portfolio Manager and Head of SEB's Global Quant Team

Publications by SEB's Global Quant Team

"10 Reasons to Invest in CTA Funds", September 2014

"10 Fallacies to Avoid when Selecting CTA Funds", February 2014

"Questions & Answers regarding CTA Performance and SEB Asset Selection", October 2012

Disclaimer

General

This material on SEB Fund 1 - SEB Asset Selection Fund (hereafter "SEB Asset Selection Fund" or the "Fund") is provided for informational purposes only, and has been prepared by SEB and contains general information in relation to financial instruments marketed, sold or promoted by SEB. Neither this material, nor the fund described herein are intended for distribution or sale in the United States of America, or to any resident of the United States of America ("US Persons") and any such use would be unlawful or unauthorized. Although the information herein has been based on sources deemed by SEB to be reliable, SEB assumes no liability whatsoever for incorrect or missing information nor for any loss, damage or claim arising from the use of this material. Past performance is not indicative of future results, which may vary. The value of investments and the income derived from investments can go down as well as up. Future returns are not guaranteed, and a loss of principal may occur. Investors may not recover the full amount invested. Potential investors are recommended to read the **Prospectus carefully** for a more precise description of the risks related to the investment and to obtain information about the requirements which may be relevant in legal, fiscal and regulatory matters in their respective countries of residence or domicile.

Information, opinions and estimates expressed in this document must be considered as exclusively related to the moment of publishing of the current document and are subject to revocation or change without notice.

The Fund faces the same risks as those normally associated with investments in equities, currencies, commodity indices and bonds. Since the assets of the Fund are risk exposed to one, several or all of the above asset types, the risk will be varying from low to high. The Fund may take long positions (when forecasting upward moving markets and/or securities prices) and/or short positions (when forecasting downward moving markets and/or securities prices). The Fund is managed with greater flexibility when it comes to the usage of derivatives instruments. If the fund invests in financial instruments denominated in a foreign currency, changes in currency exchange rates may affect the return on the investment. For funds with share classes which aim at hedging the returns from changes in currency exchange rates of the fund's base currency, SEB makes no representation or warranty as to achieving the currency exchange rate hedge.

Information on taxes (if any) has been based on sources believed to be reliable, and may be subject to change. It should also be noted that information on tax (if any) has not been tailored on any individual circumstances of any



individual unit holder and in order for an individual unit holder to understand the tax treatment of an investment the unit holder should obtain tax advice. Prospective investors should also inform themselves as to any applicable legal requirements and exchange control regulations in the countries of their citizenship, residence or domicile which might be relevant.

References to indices, benchmarks or other measures of relative market performance over a specified period of time are provided for your information only and do not imply that the portfolio will achieve similar results. Information in this material relating to performance of the Fund is for indicative purposes only. The index composition may not reflect the manner in which a portfolio is constructed. While the investment manager seeks to design a portfolio which reflects appropriate risk and return features, portfolio characteristics may deviate from those of the benchmark. The portfolio risk management process includes an effort to monitor and manage risk, but does not imply low risk.

The strategy includes use of derivatives. Derivatives often involve a high degree of financial risk because a relatively small movement in the price of the underlying security or benchmark may result in a disproportionately large movement in the price of the derivative and are not suitable for all investors. No representation regarding the suitability of these instruments and strategies for a particular investor is made.

The portfolio composition may change by the time you receive this material. The financial instruments described do not represent all of the portfolio's holdings and may represent only a small percentage of the strategy's portfolio holdings. Future portfolio holdings may not be profitable. The information should not be deemed representative of future characteristics for the strategy. It is recommended to read the most recent annual financial statement in order to be better informed about the fund's investment policy. A complete list of securities in the portfolio is also available to investors upon request.

This information may not be current and SEB has no obligation to provide any updates or changes. The unit holder is fully responsible for any decision to invest in the fund, and this material should not be deemed to be investment advice nor any form of recommendation to the recipient to invest in the Fund. For more detailed information regarding the fund, please refer to its fact sheet, Key Investor Information Document ("KIID"), management regulations and prospectus, which materials can be obtained from www.sebgroup.lu.

For investment advice tailored to individual circumstances, you are kindly requested to contact your investment adviser within SEB or your local investment advisor.



SEB Asset Management S.A. is a management company registered with the Luxembourg Trade and Companies Register under number B 28.468 and has its registered office at 4, rue Peternelchen L-2370 Howald, Luxembourg. SEB AM is a subsidiary of Skandinaviska Enskilda Banken AB (publ) ("**SEB AB**").

This document is not intended to be used as a substitute for SEB's legal documentation, nor for information that Investors may obtain from their professional advisors.

Additional important information relevant to certain jurisdictions is included below.

For investors in Switzerland:

SEB Asset Selection Fund is domiciled in Luxembourg and regulated by the Commission de Surveillance du Secteur Financier. BNP PARIBAS SECURITIES SERVICES, Paris, succursale de Zurich, Selnaustrasse 16, 8002 Zurich, acts as Swiss representative and as Swiss paying agent of the Fund. The prospectus and the key investor information documents for Switzerland, the management regulations, the annual and semi-annual reports can be obtained, free of charge, at the offices of the Swiss representative.

For investors in The Netherlands:

Do not take any unnecessary risks. Read the Key Investor Information Document. Past performance is not necessarily indicative of future results. The value of your investment may rise as well as fall. You may not get your initial investment back. Your investment horizon should be at least 3-5 years.

Please also refer to <u>www.afm.nl/ebi</u>



For investors in Spain:

SEB Fund 1 has been registered with the Securities Market Commission (Comisión Nacional del Mercado de Valores) under no. 819. A copy of the prospectus and key investor information document, the fund rules or instrument of incorporation as well as the annual and semi-annual reports of SEB Fund 1 may also be obtained from the Spanish distributors of units in the Fund. A complete list of the Spanish distributors of the Fund is available on the website of the Securities Market Commission (Comisión Nacional del Mercado de Valores) at <u>www.cnmv.es</u>.

Units in the Fund are sold in Spain in accordance with the marketing memorandum (*memoria de comercialización*), a copy of which should be provided by the relevant distributor to the investor prior to a purchase of units in the Fund.

For investors in Italy:

Further information is provided in the Prospectus in English and in the Key Investor Information Document (KIID) in Italian, which have been published with Consob. The offering documentation is available, free of charge, from the Distributors and on the website <u>www.sebgroup.lu</u>. The updated list of distribution agents in Italy is available from the distributors themselves, at the Italian paying agents and on the website <u>www.sebgroup.lu</u>.

Read the Prospectus before subscribing. Potential investors are also encouraged to read the most recent annual financial statement in order to be better informed about the investment policy of the Fund.

Past performances are not indicative of future results. Past yields are shown gross of taxation.

For investors in France:

The Prospectus and the Key Investor Information Document ("KIID") for the Fund is available at the centralizing correspondent BNP Paribas Securities Services, 66, rue de la Victoire, 75009 Paris, telephone +33- 1 42 98 10 00.



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