



HEDGEFONDER.nu



Editors Note

Managed Futures Funds closed their books for 2012, yet another difficult year, in negative territory. Following the decline of 2011, this was the first time since BarclayHedge started calculating its index in 1980 CTAs failed to generate positive returns in two back to back years.

We invited representatives of the Nordic CTA industry to join us in a round table discussion, co-hosted by RPM Risk & Portfolio Management, to discuss recent performances and other interesting topics. We were thrilled to gather a distinguished, highly diverse group ranging from small start-up managers, multi-billion Dollar fund of funds, a long biased commodity manager, systematic global macro managers, a BTOP 50 fund, a retail platform and one of the largest institutional hedge fund allocators in Europe.

In the discussion, held on January 29th 2013 in Stockholm, we tried to define Managed Futures and distinguish them from other (hedge fund) strategies, compared systematic to discretionary approaches, looked at performances and the relation of a funds AuM to its performance. We talked about coding, the “black box” (mis-) conception, the role of technology, CTA investor skill and needs, how different investor groups approach Managed Futures and more.

The format chosen to compose this paper intends to let the reader participate as close as possible and “listen in” to the discussion among industry professionals in their own words.

Enjoy getting some “Nordic Insights” to Managed Futures!

Kamran Ghalitschi
Publisher HedgeFonder.nu



Round Table – Participants

Christoffer Dahlberg – Managing Director, Estlander & Partners



Christoffer has worked in the fund industry, with an emphasis on hedge funds, in Luxembourg and Zurich since 1997. At Banque Générale du Luxembourg he led the project of registering the first fund of hedge funds in Luxembourg, and then took over the European distribution of structured hedge fund products for UK-based GNI Fund Management.

In 2003 Christoffer moved to Zurich as co-founder of an independent hedge fund distribution company, promoting single funds and funds of funds to institutional investors in Switzerland and Scandinavia. In that role he also initiated and led the development of one of Europe's first commercial microfinance funds. Before joining Estlander & Partners in 2011, Christoffer was Head of Nordic institutional investors at Union Bancaire Privée. Christoffer holds a Master's in Financial Economics and International Business from the Stockholm School of Economics and is fluent in five languages. He is married with two children and lives outside Zurich.

Anders Blomqvist – Portfolio Manager, Ålandsbanken

Anders Blomqvist is fund manager and quantitative analyst at Ålandsbanken since 2005 (former Kaupthing Sweden). Anders has developed the strategies in Ålandsbanken Commodity Fund and is portfolio manager since its launch in 2010.



Anders works with derivative strategies, asset allocation and portfolio construction in the group for tactical asset allocation, TAAQR, at Ålandsbanken. He handles the derivatives portfolios in the global macro fund Defined Risk 12 and in the low-risk fund Brig 6. Anders has also worked with an ALM study for Nuclear Decommissioning Trusts, NDTs, at NISA Investment Advisors, LLC, St. Louis, USA.

Björn Elfvin – Fund Manager, Coeli Spektrum



Björn Elfvin has worked in the financial industry in Stockholm for more than 15 years. He started his career as a trader trading personal funds. He soon found out this needed decision support systems. Since then Björn has worked full time with the development of quantitative trading strategies.

Björn has in his entire financial career always worked within the CTA investment style. In 1999 he joined what was to become Moose Capital, a very early CTA startup, based in Stockholm. Before Joining Coeli Björn worked two years with his current fellow fund manager to form what was to become the Spektrum fund. Before that Björn held a position as quantitative analyst at the Michael Östlund private banking company. Björn Elfvin has managed the fund Coeli Spektrum since its launch in June 2008. Since November 2012 the Spektrum program also is available for international investors through DB Select. The team managing the Spektrum Fund today consists of three individuals.

Björn Österberg – Managing Director, Head of Research, IPM Informed Portfolio Management

IPM Informed Portfolio Management is an award-winning, multi-billion investment management firm located in Stockholm, Sweden. Björn Österberg is IPM's Head of Research and a member of IPM's Investment and Risk Management committees. He joined IPM in 2008 from the Fourth Swedish National Pension Fund (AP4) where he was Senior Portfolio Manager Equities and responsible for strategic asset allocation (2001 – 2008).



Prior to AP4, Björn was Head of Quantitative Research at Unibank/Nordea (1998 – 2001), and before that, Head of Quantitative Research and a member of the proprietary trading team at JP Bank (1993 – 1998). Björn holds an M.Sc. in Engineering Physics from the Royal Institute of Technology (KTH Stockholm) and has several years of additional studies in both Financial Economics and Macro Economics from Stockholm University.

Hans-Olov Bornemann – Head of SEB's Global Quant Team, Senior Portfolio Manager

Hans-Olov Bornemann founded SEB's Global Quant Team in October 2003. The team is running USD 1.2bn in the successful SEB Asset Selection fund, a multi-asset (managed futures) fund focusing on absolute returns. When the fund was launched in October 2006, it was the first ever UCITS-compliant managed futures fund to be launched globally.

Hans-Olov Bornemann and his team have received several awards and/or nominations each year 2008-2012 by international hedge fund- and other financial magazines. For example, in early 2009, Hans-Olov Bornemann and the team received "the Golden Bull" - Fund Manager of the Year Award 2009 (among 2,400 funds distributed in Germany) by the magazine Euro-Financen, published by Axel Springer Verlag, Germany. Other awards and nominations have been received from Fondmarknaden (Sweden), Hedge Fund Week (UK), Hedge Fund Review (UK), World Finance (UK) etc. The team has been 100% stable and there have been no defections since the team was founded in Oct 2003.

Prior to joining SEB in 2003, Hans-Olov was Managing Director and head of Deutsche Bank's successful Nordic Equities Business (2000-2003), an institutional team consisting of 60 professionals. Leading up to that, he had a career as a top-ranked capital goods analyst at Deutsche Bank (1995-2000) and S.G. Warburg (1993-1995), (S.G. Warburg is today part of UBS) and was simultaneously head of Nordic equity research. During 1991-1993, he was an equity analyst at Hägglöf & Ponsbach, a Swedish broker.

Thomas Stridsman – Fund Manager for ALFA Commodity Fund, ALFAKRAFT

Thomas Stridsman is the fund- and developing manager for ALFA Commodity Fund. Mr Stridsman has been developing quantitative models for model-based management since the early 1990s and training fund managers since the early 2000's.



Mr Stridsman's substantial involvement in the field has made him a recognized authority among many of his colleagues. He worked most recently as a quant trader and development manager for CQG in Denver, USA. Previously he worked as Senior Researcher for Rotella Capital in Chicago, USA. At Rotella Capital, Mr. Stridsman worked in close collaboration with the company's founder and other managers. Mr Stridsman has also gained a reputation as a prominent freelance analyst and lecturer. He has published several books and articles on the subject, most notably: Trading Systems That Work, and Trading Systems and Money Management (McGraw-Hill publishers, New York). He has a degree in Macro Economics from Uppsala University.

Jonathan Furelid – Business Development and Investor Relations, RPM Risk & Portfolio Management AB

Jonathan Furelid joined RPM in 2001. Originally working as Risk Analyst for RPM's CTA and Hedge Fund risk monitoring mandates, he then moved into the Investment Management Team. RPM's Investment Management Team is responsible for the day-to-day management of RPM's multi-manager CTA-portfolios.

As a member of this team, Jonathan was responsible for sourcing managers to be included in RPM's CTA Managed Account mandates. Tasks included conducting investment Due Diligence on CTAs and communicating analytical reports to the Investment Committee. Since 2010, Jonathan is part of the Business Development and Investor Relations Team at RPM. Jonathan's current responsibilities include developing new product ideas as well as overseeing RPM's external communication and marketing activities. Jonathan holds a Master of Business Administration from the International Business Programme at Linköping's University.

Martin Källström – Portfolio Manager, Hedgefunds AP1

Martin Källström is the Portfolio Manager responsible for Hedge Fund investments (~\$1.6 bn) at AP1. AP1 manages roughly 35 billion US Dollars worth of assets and is part of the Swedish state pension system.

Martin has researched Hedge Funds in different capacities for close to ten years. Prior to heading up the Hedge Fund portfolio at AP1, Martin was co-responsible for the Private Equity portfolio at AP1 with fund commitments of \$1.8 bn. He was also responsible for constructing the investment strategies for the Real Estate and opportunistic investment portfolios. Before joining AP1 he was Head of Investment & Actuarial Consulting at Aon in the region and a member of the Global Investment Practice Committee. He began his career as an actuary at Watson Wyatt and holds a Master in Finance from Stockholm School of Business.

André Havas – Asset Management Expert, Movestic Kapitalförvaltning

André Havas works as an asset management expert at Movestic Kapitalförvaltning, the asset management arm of Movestic Livförsäkring AB. Prior to joining Movestic André was Head of Investor Relations for a Swedish FOHF manager.



André also spent 5 years in senior positions on the sales, marketing and product development side in London with some of the most renowned alternatives firms globally. André has advised and dealt with some of the most sophisticated and professional buyers of alternative asset management services in Europe across a variety of strategies and management styles. André speaks four European languages fluently and holds an academic degree in business law and Italian and French.

Pirkko Juntunen – Journalist, HedgeFonder.nu

Pirkko Juntunen started her career as a journalist at Institutional Investor newsletter service, with a focus on institutional asset management. Later she was recruited by Financial News to increase their international news coverage on asset management. Pirkko was also part of the team that started eFinancialNews.com, a Web-based newspaper now owned by Dow Jones.

From 2004 Pirkko was product specialist at Fidelity Investments where she worked closely with fund managers responsible for pan-European, global and emerging market focussed equity funds. Since 2006, Pirkko has worked as freelance journalist specializing in institutional investors and focusing on both traditional portfolios and hedge funds. Besides journalism Pirkko also works with communication and events in the pension and asset management industries. Pirkko studied international journalism at City University in London and is a graduate of the University of Uppsala. She has dual citizenship in Sweden and Finland and is based in London. Since April 2012 Pirkko writes as a freelance journalist for HedgeFonder.nu.

Kamran Ghalitschi – Publisher HedgeFonder.nu

Kamran started his career in 1994 as broker/dealer trading equities and derivatives on the US markets within the asset management division of Bank Austria in Vienna. From 2000 – 2002 Kamran was head of marketing and sales for the online brokerage division of Raiffeisen Banking Group. After a year as PR consultant servicing financial and business media as well as foreign investment funds on the Austrian market, Kamran in 2004 joined the Quadriga / Superfund group where he worked in several marketing, sales and management positions in Vienna, Frankfurt, Berlin, Amsterdam and Stockholm. He then joined Sares Invest, an Amsterdam based multi-family office with a focus on fund of hedge funds.

Kamran co-founded Nordic Business Media (NBM) in January 2011 and publishes among others HedgeFonder.nu, the leading news and content media focusing on the Nordic alternative investment market and HedgeNordic.com, which calculates and publishes the Nordic Hedge Index, NHX. NBM is also organizer and host to the first Nordic Hedge Award to be held in April 2013.

Nordic Insights: Managed Futures

Kamran Ghalitschi: Welcome to our inaugural roundtable discussion giving some Nordic Insights to Managed Futures. Let us start by defining what Managed Futures actually are. What is the core essence of a Managed Futures fund? And, is the term CTA and Managed Futures always the same thing?

Christoffer Dahlberg: When I started in the hedge fund business almost 15 years ago, there was still a clear distinction between hedge funds and CTAs. That distinction has however evaporated over the years, which is a shame. The connotation of hedge funds is typically slightly negative, something that to my mind comes from factors that may apply to hedge funds but not to CTAs, mostly external funding risk and illiquidity.

So I think important distinguishing factors here are precisely that, the high liquidity of CTAs and the fact that we trade on margin, i.e. the lack of foreign funding risk. Also included in the definition to my mind should be that you trade derivatives, whether futures, swaps or options. Typically I would also associate a CTA with being systematic, I'm not sure whether that's part of the classical definition and obviously, that's not to say that a manager with a discretionary element could not be called a CTA but still, for me that's part of it.



Kamran Ghalitschi: Is trading futures a core element of a CTA? I had a discussion with another Swedish manager, who basically does the same as many of you here, but he uses ETFs as instrument rather than futures and we had a long discussion if that was a CTA.

Thomas Stridsman: I think for Europeans and Swedes, there is a bit of confusion at first. The term CTA, Commodity Trading Advisor, comes from the States, and there, commodity trading is more or less similar or the same as trading futures. Whatever you can trade futures on is classified as a commodity and falls under the same regulation of CFTC and so on, which is totally separate from the usual equity hedge fund world in America. It's only in maybe Sweden and Europe you have this sort of a mix up. So, it's a little bit of confusion of terms. But basically, in America, as far as I know, CTAs are distinctly different from hedge funds.



Jonathan Furelid: One thing I often come across is that people think that CTA is the same as trend following, which to me is not the case. When we look at CTAs, we actually divide them into three groups: trend following, fundamental / value-driven, and short-term strategies. I think a broader definition is needed rather than saying that CTA is equal to trend following.

Anders Blomqvist: Coming back to one of the instruments used, I think a core part of many CTAs is leverage. And I think getting leverage with ETF for example is possible: either you borrow or you use some geared ETF. But that's not the same type of leverage. Hence, I think the instrument used is a part of the definition.

Kamran Ghalitschi: But are those synonymous terms? Is Managed Futures and CTA exactly the same thing with a different nametag?

Thomas Stridsman: I, for one, would be very happy if we could lose the CTA name altogether. So 'Managed Futures' to me would be much better. Losing the term CTA, and sticking to Managed Futures would be much better in order to define the industry to the benefit for all of us.

Hans-Olov Bornemann: Well, it depends on who you speak to actually. CTA is a legal term, whereas 'Managed Futures' is not. What you're trying to do is to categorize different hedge fund strategies, and then Managed Futures would be the more appropriate term to use. The term CTA is a misnomer nowadays. When it all started the Managed Futures managers were only trading commodities. So back then, the CTA term was fine.

But today, Managed Futures managers also use equity futures, bond futures, currency futures etc, i.e. much more than just commodity futures. The single common denominator of these managers is that they're trading futures to a much larger degree than other hedge fund managers. And then of course you can start getting into different subgroups of Managed Futures funds: short term, medium term, long term, fundamental, relative value etc. We use CTA and Managed Futures as synonyms when speaking to institutional investors. However, when it comes to non-professional investors, we use the term Managed Futures, since the term Commodity Trading Advisor runs the risk of giving an incorrect picture of what we do.



Björn Österberg: I think that we all agree that the two are closely related, but from IPM's point of view the term "CTA" doesn't necessarily fit. The reason being that people in general, and in this region specifically, tend to interpret CTA's as being trend following, i.e. using technical factors in order to identify trends. As mentioned earlier, in the US for example, a CTA is broader and, apart from trend following, also includes pattern recognition, short term, and non-trend.

In this case I think there is a better match between CTA and Managed Futures as it also incorporates what we focus on; that is taking positions based on fundamental factors and data, and hence foresee a trend rather than following it. Having said that we are similar to a narrower interpretation of a CTA as well, in the sense that we are model based and trade futures in multiple asset classes.

Anders Blomqvist: I have another objection to being classified as a CTA and that's that my fund is long biased. A common denominator of Managed Futures or CTAs is that they are unbiased. So my performance would be much more correlated to a fully collateralized long only commodity fund than to a CTA index. That distinction made me think.

Kamran Ghalitschi: *Does it matter what we call it? People always try to put things into boxes and label them, but at the end of the day, for you as an investor, Martin, does it matter what it is called?*

Martin Källström: We try to cluster the hedge fund universe into groups that are more similar than dissimilar to each other, because we want to focus our efforts on the most interesting parts of the hedge fund space. I personally think 'Managed Futures' is a good definition of it. Within Managed Futures, I have clearly defined boxes as well, or categories, that I think make sense to look at from different perspectives. It depends on who you speak to. When I talk to colleagues and management, I could say Managed Futures or I'd rather say systematic futures based strategies because it says more than Managed Futures, for most people. So, it depends. I don't think the label in itself is so important, from my perspective.



Kamran Ghalitschi: *We talked about the different styles of Managed Futures, can we dare call Managed Futures an own asset class?*

Thomas Stridsman: No, it just isn't. Just as being a stockbroker is not an asset class. Nor is a Managed Futures fund. Futures maybe is an asset class, but it's a derivative too. So that's not an asset class either. So you are two steps away from it.

Martin Källström: I would define it as a trading strategy and then within the trading strategy, you can exploit betas and alphas, and that is the most important thing. Is it the systematic beta exposure through a trading system or is it some sort of an alpha engine within the trading system?



André Havas: I would jump on Martin's conclusion where he described that these are trading strategies. So what we are looking for are good strategies to put in place which will suit the client base that we have and suit the parameters within which we can work as a legal entity. So, we have basically constraints with regards to liquidity, operational structures, and legal structures. So, that's the outset from our work. Within that outset, we will often fall to or lean towards, what we in this room don't know what to call: CTAs, Managed Futures, or trading strategies. Within the Swedish Defined Pension system, you have been subjected, within the alternative space, to use these kinds of strategies.

I think what's needed in my line of work now is to find some sort of a common understanding of how these strategies can work and how they can be bundled together and how they can work with other asset classes as well. There's a steep learning curve for many of the people who are allocating in to these strategies, especially within the pension system in Sweden today.

Kamran Ghalitschi: *Something Christopher mentioned and it comes up again and again of course is the term systematic. If we try to get our heads around what systematic means often we see it in comparison or opposition with the term discretionary. But I would think even discretionary guys have a system. Their approach is not random, we'd hope. Right?*

Björn Elfvin: I don't think it's black and white. But if I should try to explain what we do, we have a defined strategy that's implemented in computer code. The output is what we call trading signals, which means a very well defined point to get into the market and out of the market, as well as the size of the position. Size is a function of the funds NAV and the volatility of that particular market. We always follow our trading signals. Always. I consider that being systematic and disciplined.



If you have a chart with one or several indicators or maybe not even an indicator at all, just the chart itself, and you pick your trades from what you see on your chart, I consider that being discretionary. Between those extremes, I think it's a wide range where one could be more or less disciplined or discretionary. But at the end of the day, if you should be systematic and disciplined, you have to take all the signals. There's no trade off. If you don't take the signals your strategy or model is generating, you don't have a model. Then you are discretionary.

Thomas Stridsman: I agree with the disciplined part Björn laid out. When I lived in America and got to know several very good discretionary traders, and when you talked to them, what they didn't understand themselves, really, was that the better they were and the more successful traders they were, the more systematic they were inside their heads.

They didn't have it in code, but they were doing exactly the same thing day in and day out and they had the discipline to cut their losses and so on and place the trades and being totally separated emotionally from the markets. So, discipline and systematic, I think, goes hand in hand. And maybe for us doing this with code means that we are just not as disciplined as you could be. I need my code to tell me what to do.

Björn Österberg: Regardless of whether you are a discretionary or systematic manager, you obviously have to be structured in some way, so I would completely agree with my colleagues' statements. Having said that, it's also important to keep in mind that the two different investment styles differ widely from each other.



A manager explicitly labeling himself “systematic” relies on a broad and diversified set of “computerized” investments themes that are constantly evaluated in the current market and macro environment and hence take “feelings” out of the equation. A discretionary manager with a system may attempt to benefit from e.g. carry as well, but chooses the greatest opportunities rather than scalping carry out of the entire universe all the time; obviously depending on the size of the opportunity. It would be challenging for a discretionary manager to process such vast amounts of data on a daily basis.

Martin Källström: I agree that it is from a philosophical point of view a grayscale where every strategy and manager is more or less systematic. However, in practice I believe the distinguishing factor is if a manager is trading on a predefined/coded instruction or if the manager is taking a subjective decision on each trade.

Anders Blomqvist: I think an important aspect is that most systematic strategies evolve over time. Markets evolve, we get new contracts and other contracts die. And you tune here, you tune there, you add a new model. That in itself, that evolvement of your strategy, makes it not fully systematic. A fully systematic strategy would be someone writing a book a hundred years ago, he dies, and you used the strategy and you never change it until you die. That's a fully systematic strategy.



Thomas Stridsman: Absolutely. There is a constant development of strategies, a continuous development of strategies. But once I put my change to work for tomorrow and that generates a signal, I can't go back and say, “Oh no, not today. I will do what the model would have done yesterday.” Now I'm sticking to this, period.

Hans-Olov Bornemann: I think it's quite interesting to look at the hedge fund world from a top down perspective. When doing so, you can identify two types of successful hedge fund managers. On the one hand side you have the street smart people which have been in the market from their early days and learned through own trading experience how the market behaves and how it reacts to news. These guys are traditional discretionary managers.

The most systematic and disciplined discretionary managers are also the most successful ones. On the other hand, you find successful hedge fund managers with an academic tilt. They love numbers, they love programming and they love to go through historical market data and construct their own investment model. These guys gather experience from analyzing market data and the relationships between different kinds of market data. At the end of the day, both types of successful hedge fund managers do their utmost to understand reality and to implement their strategies in a disciplined way, some use their brain and memory, others use computers and large databases.

Kamran Ghalitschi: *Looking at the aspect of technology: I would like to talk about what role it really plays. And is that technology, especially the technology that Managed Futures use like databases, codes, automated signals and executions etc. part of the suspicion and misconception that the broad public has about computerized trading?*

Hans-Olov Bornemann: Within computerized trading, there are many different types of traders. The ones that have received a lot of criticism are called ‘High Frequency Traders’. They tend to have an average holding period of three seconds rather than three months which is usual for Managed Futures. High Frequency Traders are very different from Managed Futures. But, I also sense that your question touches upon the discussion of whether a computer model is a black box or not. Well, in my team at SEB, we would not be able to pursue the strategy that we're pursuing without technology, because we're using technology very heavily. In all parts of society, computers and information technology have become very important tools to facilitate information storage, to transfer information, to do calculations and so on. In the modern world




of investing, technology has become equally important. If you think about it, either you have a brain which is receiving all the information and that is then drawing conclusions from the signals. "These are signals on which I should act in the following way." It's quite amazing how we can trust a human being to take so much data into account and make correct investment decisions. What you are doing when you create a computer model to make investment decisions is that you say, "Okay, I've seen that this phenomenon tends to generate pretty good returns, and therefore I'm going to put it into my model." And then I've seen some other phenomena, which I also incorporate into my model.

You don't need to keep everything in your head. You can keep it in a computer. But that does not imply that each and every Managed Futures player has the same model, because they don't. Just look at the performance dispersion. You need basically to combine your insights about how markets operate and your knowledge about how to build a good forecasting model. Having these two areas of expertise, and if you can marry them, you're going to be able to do pretty well. But it all comes back to understanding reality and then implementing it in a systematic way. Needless to say, technology can give you a great investment advantage in today's data-rich and complex world.

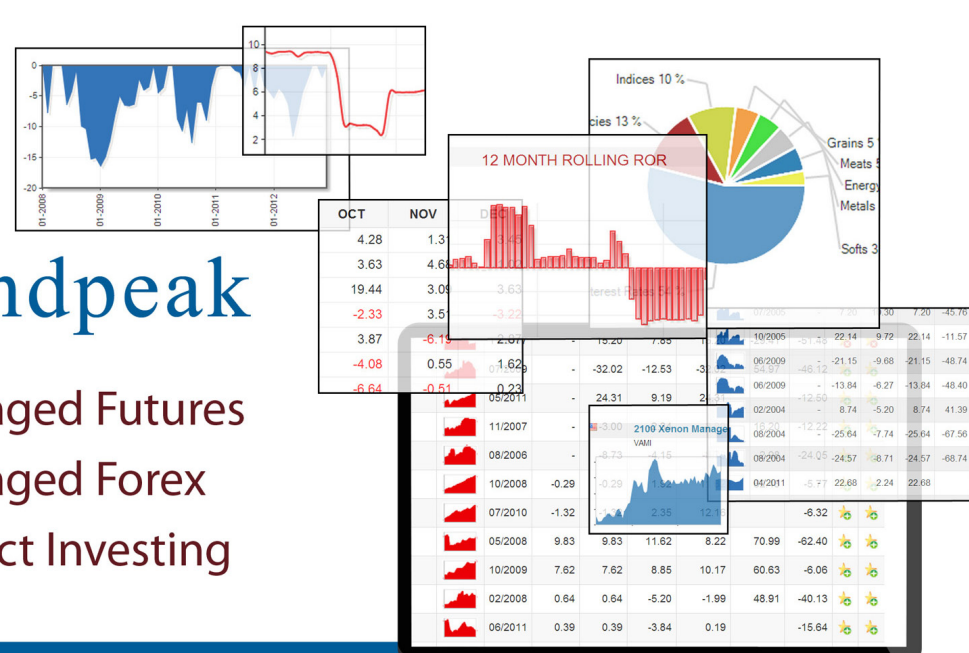
Kamran Ghalitschi: If you were to take the code of your systems and write it down, do we fill one page or do we fill books or entire libraries? Just give us an idea.

Hans-Olov Bornemann: You fill more than ten years of work for a handful of people. This sort of business is a very investment heavy, but very easy and efficient to maintain. We are spending very little time trying to figure out what we should do in the market on a particular day, because the system will tell us what we need to do. We feed the system with new market data, and it will help us to figure out what we should be buying and selling.

Advertisement



Managed Futures Managed Forex Impact Investing



Tailor made managed investment databases

Customized fund performance reports

Kamran Ghalitschi: *How complex, how difficult a thing is it to develop such systems and models?*

Hans-Olov Bornemann: It takes time. It takes a lot of time. The problem is that even if you have an idea and you can put it into a few lines of code, how can you be sure that you have come up with a good money-making idea? Will you be able to implement your ideas consistently across several portfolios? How will the new idea change the risk in your portfolio? If you want to test the quality of your new ideas before you throw real money at them, if you want to be able to manage your risk and to be consistent and efficient in your implementation, then you will need to build a pretty comprehensive system that is able of importing data, cleaning data, calculating different parameters, estimating future returns, estimating risks and determining the size of your positions. So, at the end of the day, a lot more code is required than just the few lines you thought of initially.



Jonathan Furelid: Is your program, for instance, systematic in the sense that it also executes systematically or do you have manpower actually executing trades?

Hans-Olov Bornemann: We have chosen to have a final process step where a team member of my Global Quant Team gives his approval to the suggested trades, before the orders are passed on to our central dealing desk for execution in the market place.

Thomas Stridsman: Can I just briefly, because this is a fun topic, go back to what Hans-Olov said about the complexity of the code and the actual amount of code? Even if the system is only half a page of code, twenty rows of code, the complexity is still huge, enormous. You have put years and years, and different ideas, tested this and that to get there. Friends of mine or younger people, people out of university ask me: "Oh, cool business you are in. Can you show me how to do it?"

No, I really can't, because somewhere along the line, you must have had this as a nerdy interest. You can't just learn it or pick it up from somebody else. You need to have been this nerd getting stuck in this business in the first place, because that's where the super complexity comes in.



Björn Österberg: At first glance, some of the building blocks in our strategy would probably appear to be fairly rudimental and could be found in any standard economic literature. The complexity lies in how these building blocks are combined and the constant process of managing long and broad series of data; these are two of the areas where many years of research come into play.

The challenge lies in the construction of a model that is stable and robust, and at the same time diversified enough, over investment themes and time horizons, to ensure we capture a significant part of the forces driving the price of a security.



Christoffer Dahlberg: On that, I think the proper way to communicate with investors is exactly that. Demystify the whole thing. There's this black box concept applied to CTAs which to my mind is completely illogical, given that in spite of decades of data, there is simply no objective piece of evidence that discretionary management works, but plenty of evidence that systematic management does.

So where is the black box? But when we speak to investors it's important that we don't do so in codes, but rather about our thinking behind the codes and the logic that drives us.

Kamran Ghalitschi: *Let's talk about lagging performance since 2008 and especially the last one or two years. I'm going to throw the ball to Jonathan. He may also give us some insight on some research I know he has been working on looking at the relation of large AuM and performance.*

Jonathan Furelid: I looked at a number of news sources and couldn't really find any CTA performance reviews updated on a regular basis. So, I started to work on a performance review for Nordic CTAs. I publish that now on a quarterly basis for HedgeFonder.nu. Looking at the performance for managers in Scandinavia during 2012, it shows that managers trading smaller assets have, on a risk-adjusted basis, outperformed their bigger rivals. That also plays into some research that we have done, at RPM, looking at smaller CTAs and how they compare to larger ones. *(Editor: study can be viewed on <http://hedgefonder.nu/2013/01/dismal-year-for-nordic-ctas>)*



We've come to some conclusions. It's not black or white, but it's apparent from that research that smaller assets are better than larger assets, particularly for certain strategies that are sensitive to capacity constraints. For a company in the short-term space, assets constraints become a very critical issue and a very important one when assessing the potential for these managers. We have come up with a number of rules that allow us to exploit CTAs in their most interesting period in their life cycle given size- and age restrictions; again this period is different depending on the sub-strategy used. I think this is an interesting topic and plays into a broader discussion about assets, how that affects your strategy; when do you feel you are getting too big?



Hans-Olov Bornemann: I don't think it's a constraint at all, not even for the largest Managed Futures players in the world. The reason is that, the liquidity that is available for Managed Futures funds is not only the liquidity that you can see in the futures market itself, but also the liquidity in the underlying spot markets. In case there was a lack of liquidity in a particular futures contract, arbitrageurs will step in and create liquidity for you by entering into an offsetting trade in the underlying spot market.

Also, keep in mind that we're not talking about the liquidity in one asset class, we're talking about the liquidity in all parts of the financial markets: equities, bonds, short interest rates, currencies and commodities. So, I don't think capacity will be an issue for any Managed Futures player in the foreseeable future.

Kamran Ghalitschi: *I've seen research that certainly would indicate that large funds struggle at one point.*

Hans-Olov Bornemann: Generally speaking, I would agree that the more assets you have, the harder it is to generate good returns. However, the equally important factor is the investment universe you have. Are you tapping in to the liquidity of five global asset classes or just Swedish micro-cap equities? Don't forget, Managed Futures managers are pretty smart people. They will not allow their funds to become so big that they risk losing their ability to generate excess returns and, thus, performance fees.

Pirkko Juntunen: Martin, is that something that you consider when you're looking at CTA managers or hedge fund managers in general?

Martin Källström: Absolutely. Generally, I'm the first one to be very worried when there's overcrowding risks in certain assets or investment strategies. I could see some assets currently that show signs of it. Everyone wants to jump on the same band wagon and that could of course be very risky.

Kamran Ghalitschi: *Can you give an example, are you thinking of corporate bonds for example?*



Martin Källström: Well, that's one area that shows signs of it. But when it comes to CTAs, and I've said this many times before, I don't think it's a great issue with size for the industry as a whole. Nevertheless, It can be big issue for some strategies and managers to grow in size. For instance, in the more capacity constraint areas of short term trading, I am very skeptical if they become too big. But when it comes to the larger trend following strategies of today, they typically trade with continuous models where they build up portfolios and positions over time. And given the longer term nature of the largest ones, I'm not so worried about size here.

Size is though always an important factor for me and it needs to be analysed for each applicable strategy and set-up. I think it is fair to put it this way; Everything else being equal, it is better to be small in size than large in size. But very rarely is everything else equal. Typically with size, managers grow resources and enhance capabilities and

generally speaking they build a better business. But those need to go hand in hand. At the time when a manager is just growing assets and not improving the system, that's obviously not benefitting us as investors.

Pirkko Juntunen: So there's no such thing as an optimal size?

Hans-Olov Bornemann: Of some sort. I think there is an optimal size. And the optimal size is basically where a Managed Futures player is closing the fund for new investments. If you think about the most successful systematic trader in the world, Jim Simons, he not only decided to close his fund at a certain size but also to successively throw out external clients. So, yes, there is an optimal size and you would not be very clever to go beyond that.

Martin Källström: I find it hard to assess this issue in an isolated fashion like this. Obviously there are different incentives that could drive managers appetite to raise assets. Certain firms with certain incentive structures can lead to dangerous misalignment on this matter. Some firms are clearly not growing assets only to the point that maximizes returns for investors. They'd rather grow their assets for short term gains with the risk of losing performance long term. So, I think it's very hard to speak generally about it like this.

Hans-Olov Bornemann: That's correct. If you suspect a manager to be maximizing profits on a short term basis, the client should look for another manager.

Björn Elfvin: When you go from being a US\$10 million manager to a billion US\$, you have to develop your strategy and your business and your organization, as mentioned before. I completely agree. But I don't either consider market liquidity to be a limiting factor, not on the horizon that we can see anyway. And I would also like to comment shortly on the question of the optimal size. It's very dependent on your trading style.

If you have a long term trend following trading style, I think you can grow your amounts tremendously. If you have a short term trading style or some kind of market maker style, it is harder. And in the specific case about Simons, I think they had a rather specific trading style where they couldn't manage that much money. So it's largely dependent on the investment style or the trading style.



Thomas Stridsman: My take here is that actually if you're small, it can also hurt you performance wise. And I think this goes up to maybe a few hundred million US dollars depending on how many strategies or systems you actually have to manage. Small managers can suffer from having to increase or decrease trading size in what become too large increments. I'd rather go from like 36 to 37 contracts in one market, than having to move from three to four. That's a 25% to 33% increase and that adds volatility. Sometimes to my advantage, sometimes to my disadvantage, but that's volatility.

Jonathan Furelid: Does that limit your investment scope as well? The markets you choose to trade?



Thomas Stridsman: No it doesn't limit me in that regard. It's just that changing position size, when you're trading small positions, that adds volatility compared to if you're increasing percentage wise in smaller steps, when you're larger in size.

Björn Österberg: For IPM, the instruments, and the gradual trading style we employ, size doesn't have a big impact on our ability to perform. As a fundamental manager in particular, we would definitely be one of those that do not have any problems with liquidity. In that way we are quite similar to long term CTA's as all our strategies are long term oriented themselves, and as fundamentals typically don't shift overnight, neither will our positions.

André Havas: I think the size of certain CTA:s gives people reassurance of the scalability of the latter as well as offering a stamp of approval for the whole industry. Still people plow in money into less scalable strategies in the asset management industry than these ones oblivious about size. But all of a sudden, if you look at the Wintons, you see that they manage XYZ billions of dollars, and you worry, even though you can empirically assert that size is not a constraint.

Kamran Ghalitschi: *2012 was the first time since BarclayHedge began their recordings in 1980 that we've had two back-to-back negative years in the Barclay CTA Index. It's not the worst drawdown. I think what is quite noticeable though this time is the time-off-peak for many managers. CTAs have been pronounced dead, and then un-dug a couple of months later again so many times over the years. But, put simply, what's the problem this time? Where's performance, are CTAs finally dead, are they going to be back?*

André Havas: I think performance has just been a terrible miscommunication between layers of participants in this market. So it's more or less hearsay amongst industry professionals that CTAs are dead, whereas we can clearly see today that everyone here is alive, and even Hans-Olov is ready to take on more money. I think the recent surge in CTA allocations, in Sweden especially, if you look at the less sophisticated investors, has come on the back of 2008. And where people have expected that their 2008 performance figures will repeat themselves and it didn't happen. When it doesn't happen, people seldom look for the answers. They'd rather do something else.



Christoffer Dahlberg: For us, this actually is our deepest drawdown period. We have done a lot of work in looking at the models and looking at the market to see if there's something fundamentally different. And we haven't really found anything. What we've found is a highly political environment where the pricing mechanisms have been put out of work, and where very few trends, as a result, have emerged. And as a trend follower, without trends you will tend to suffer. But we also differentiate.

As I mentioned, we run purely trend following strategies and we also have systematic macro buckets that actually haven't done badly in that sense. What has really suffered recently is the mid and long term trend following. I think you need to be clear on that. I think in systematic macro space, you've been able to make money, in the short term space you've been able to make money, but you have suffered on the long term trend following. But I think it's very important to communicate very actively with your investors because, as you rightly said, many people came into this industry on the back of '08. And if you did, you haven't really seen anything performance wise until today and there it's very important that you communicate, and that the selling process is correct to the extent that you really explain to people, over what horizon you should look at this.

Kamran Ghalitschi: When you look at retail investors they tend to buy funds that are at an all-time-high, chasing yesterday's performers, which increases their chance of losing money. But as a more sophisticated investor, is this a time, in the draw down period, you're buying into CTAs or are you standing aside?



Martin Källström: First of all, not all sophisticated investors have the benefit of being able to execute investments in a rational manner. There can be many interests from many parties and some of the interests might lead sophisticated investors to irrational behavior. With this said, I actually think the set-up at AP1 is strong and robust. This means that we should be sophisticated and mature enough to see drawdowns as long as the ex-ante investment rationale is present.

With this said we fortunately don't see draw downs in our portfolio right now. We are strategic investors in this trading strategy and we should have staying power. On your question whether it's time to buy or sell now, based on performance, I would say it is neither a buy or sell time. But again, I don't ever think it's a buy or sell based on past performance. It is just not that easy. There are so many more parameters that should go into a buy or sell decision.

Anders Blomqvist: I have two comments here. Firstly, when looking at historical data of a CTA or Managed Futures index, even if you're conservative and say that, "Okay, I won't get this going forward", it's still a no brainer investment. Given the correlation to traditional asset classes and some kind of positive return, it's still something that suits most portfolios.



Your single access point to the Nordic
hedge fund industry and investors

It's really about what you should really expect from these investments. The second thing is regarding the length of drawdown periods. We now live in zero interest rate environment and we compare it to something that was at 6% interest rate if we go back to the 90's. On the margin that makes quite a difference.



Kamran Ghalitschi: Following up on this: are Managed Futures a product for retail investors? Is it something they should have, must have, or shouldn't have in their portfolios? And the other topic I want to put to the round: how investor-friendly are CTAs? We mentioned 'the black box'. Yet, it's something that all of us probably know there aren't any asset classes that are as liquid and transparent, and all those things, as CTAs and still they are demonized as these black box models.

Christoffer Dahlberg: I handle institutional investors but I still find this a fascinating discussion because no one would ever think of questioning the right of a retail person to buy an emerging debt fund, maybe including an issue from Nigeria with highly questionable liquidity and a whopping yield of 3.8%! You have to ask yourself where the real risks are and maybe also try to remember what happened quite recently, after all, 2008 is only five years ago. So from that perspective I wouldn't qualify it along those lines, I would simply say that Managed Futures are a great diversifier in any investment portfolio, retail or institutional.

André Havas: I think retail investors should be subject to Managed Futures but they shouldn't touch them themselves. Instead, they should access Managed Futures through managed portfolios or multi asset portfolios across other portfolios. But then again, I think every fact sheet is quite hard to digest for the average retail investor at the end of the day.

Christoffer Dahlberg: I think the general point of a black box is a great misconception, as already stated. We won't show you our codes because it doesn't really bring anything, but we will be absolutely clear in explaining what drives us, what our thinking is, what the investment process looks like, how we view and control risk, and how we go about research. Getting a good understanding of that is more important for an investor than seeing the code.

Thomas Stridsman: I used to say that, "What is more 'black box' and difficult to trust: My code or the discretionary trader that will be home with sick kids tomorrow?"



André Havas: And even if there's a black box and the code doesn't work, you still can get out, within the first five minutes, whereas it would probably take you a week to sell your Kazakhstan equity exposures.

Kamran Ghalitschi: *Martin, if you want to compare Managed Futures with other hedge fund classes or styles, how investor-friendly do you think they are? How much did CTAs learn from hedge funds, and how much did hedge funds learn from CTAs or what could they learn in terms of liquidity, transparency, managed accounts....*

Martin Källström: I think most CTAs are very investor friendly. When it comes to transparency, the only things I typically can't see are the parameters and the details in the models. Of course there are some exceptions but typically transparency is great. Fortunately, there are not too many exceptions in the CTA space, whereas in some other hedge fund strategies this could clearly be an issue. From our point of view, we are trusting managers with our money and they should express trades according to a strategy that we should have understanding of. So, when it comes to being a partner, I think CTAs generally are very well equipped.

Jonathan Furelid: In Martin's case, what we are talking about is managed accounts, which gives you full transparency if you want to. For a retail investor, you have to go through funds which are not always that transparent, and it is fully understandable if you view CTAs as non-transparent. I don't know much about the transparency offered by other hedge fund strategies, what I can say is that RPM, throughout the years, have been focused on transparency, doing everything through managed accounts and doing a lot of reporting around our investments.



Hans-Olov Bornemann: I think this is an interesting subject. Institutional investors, like Martin, have a good understanding of what Managed Futures players do and what they don't. Professional investors understand your strategy, they know the instruments you use and appreciate that you need to use computers and databases to carry out your strategy. They think Managed Futures funds are quite transparent. Less sophisticated investors, on the other hand, may find it harder to understand your strategy, to understand when your strategy will make or lose money.

They may not be so familiar with derivatives and, in some cases, they may get scared when you tell them that you use computers for coming up with your investment decisions. Such investors may perceive a Managed Futures fund to be non-transparent. Having said that, by explaining how the strategy works and by explaining how derivatives function, such misconceptions can be corrected.

Kamran Ghalitschi: *And on the other side, for those of you working with investors. When talking to large institutions, do you feel and sense that they always have the skill they need to allocate to such sophisticated products as your own, composing their own multi-billion dollar CTA portfolio?*

Christoffer Dahlberg: I think that's very much dependent on the institutions you talk to. Do they want to take single manager risk or should they rather buy an RPM product, that's that discussion. But I would claim from a broader perspective that most institutions are definitely equipped to understand the logic behind it.



Björn Österberg: I also think this varies broadly between groups of investors. What may be difficult though is to find sufficient diversification between CTA managers. As a group, I would argue trend following strategies are rather correlated and the investor really needs to explore all aspects of the investment style to achieve the diversification their CTA portfolio needs; although a CTA portfolio is usually very diversifying to the investors' other portfolios.

Kamran Ghalitschi: *Do institutions really need the level of transparency and information they demand, or do they just want it?*

Hans-Olov Bornemann: I think they both want it and need it, because from their perspective they need to keep track of the risk in their total portfolio. If they cannot see through a specific investment in their portfolio, they won't be able to get a good understanding of the overall risks in their total portfolio. Then, of course, the question is: What clients will actually need it? Well, only the ones who are sophisticated enough to use it. So, if you can't use all that information, you probably don't need it. In that case, it would probably make sense to have it as a packaged fund investment instead. But it depends very much on the client, how sophisticated the client is.

Kamran Ghalitschi: *Does anybody have any final reflections that you would like to share before we close this round table discussion?*

Hans-Olov Bornemann: I think there's one point that I would like to make in that regard. Human beings are very much focused on the most recent history and tend to believe that the most recent history is indicative of what to expect for the future. This human behavior is very prevalent when humans try to forecast the performance of a fund, a market or a single stock. Unfortunately, this method of forecasting the future is very poor when it comes to investing. There are studies showing that if you buy and sell funds on the basis of their past performance, you're going to be losing between two to six percentage points per annum.

Clients would be doing much better in their fund selection or stock selection if they took a longer term view, both with regards to the evaluation of an investment and with regards to the holding period. Another point that I would like to make is that an investment should always be evaluated in the context of the overall client portfolio as opposed to on a stand-alone basis. Many human beings suffer from "bucket thinking" and are not so good at taking a total portfolio perspective. If you think that a Managed Futures fund is a good long term ingredient in your overall client portfolio, stick to it. It does not make any sense to buy such a fund after it has already had one of those marvelous runs and then two year later sell it after it has suffered one of the recurring drawdowns. It would be much smarter to do the opposite or to hold on to the Managed Futures fund on a long term basis, irrespective of the performance development over shorter periods

Pirkko Juntunen: If we're back here in a year's time, what would your predictions be? Where do you think the industry, the CTA industry in particular, is in a year's time?



Hans-Olov Bornemann: From my perspective, it should be said that it is basically impossible to forecast the performance of a Managed Futures fund on a shorter term basis. On the longer term basis, however, I'm very confident in saying that Managed Futures funds are going to continue to perform well as they have historically. Managed Futures are definitely not dead. How many people actually invested a lot of money into Managed Futures before they rallied in 2007 and especially 2008? Nobody forecasted them to deliver such eye-popping returns, right? Today, people are saying it's a strategy that's been gathering too much assets and that won't generate any good returns any more. I think this view will be sharply revised over the next couple of years when Managed Futures funds start to deliver attractive returns again. One shouldn't make the mistake of building long term forecasts on the basis of recent performance history – only inexperienced investors do that.



Thomas Stridsman: As Hans-Olov, I'm not making any predictions and I really want to stress that I don't care. I mean, the markets are here for one reason. It's to drive prices higher or lower, to find sellers and buyers, and sometimes they go sideways. So from that definition, trends will always be there.

Somewhere or at some point every market will have its trends. Whether they are fundamentally driven or whatever; I don't care. All I know is that CTAs have been declared dead so many times and they have always come back because the point of the market is to create trends.

Björn Österberg: I think we'll see fundamentals continue to increase as a driver of performance, rather than the risk-on, risk-off behavior that somewhat distorted the markets up until mid-2012. This is my personal view, but if I'm right, this will definitely benefit IPM given that our strategies are based on fundamentals.

Jonathan Furelid: Making short term predictions is of course very difficult, but there is a clear cyclicity in Managed Futures returns and I think we are at the very bottom of this cycle now. So, for me, it's more to the upside than to the downside at this point.

Martin Källström: If there's one entry point to avoid, I believe it would be when managers are at all time highs with big potential falls to stop losses and big profits in the systems. We're clearly not there now, and I don't think it's as easy to say that a bottom will be followed by a peak.

Anders Blomqvist: Studying correlations is an important part here. Correlations within currencies are falling now as are some correlations in commodities. For instance soft commodities are today virtually uncorrelated to equities and the same with gold. The direction seems to be towards a more normalized world, coming from a risk on, risk off environment.

That doesn't need to be good for CTAs. CTAs like when everything has strong trends. But nonetheless it's good to have many different directions. So then, that might be a fertile ground after all.



Thomas Stridsman: Whether it goes up for one more year, two more years, I still don't care. This works, per definition it works.

Kamran Ghalitschi: Well, what better words to close on. Many thanks for joining in today and the insights you shared.

Advertisement



2012 Nordic Hedge Award

www.hedgeaward.com



Swedish House of Finance



supported by:



GENERAL TERMS AND CONDITIONS

These are the terms and conditions which govern the use of "Nordic Insights", an online magazine edited and distributed by electronic means and owned, operated and provided by Nordic Business Media AB (the "Editor"), Corporate Number: 556838-6170, BOX 7285, SE-103 89 Stockholm, Sweden.

DISCLAIMERS AND LIMITATIONS OF LIABILITY

1. The Content may include inaccuracies or typographical errors. Despite taking care with regard to procurement and provision, the Editor shall not accept any liability for the correctness, completeness, or accuracy of the fund-related and economic information, share prices, indices, prices, messages, general market data, and other content of Nordic Insights ("Content"). The Content is provided "as is" and the Editor does not accept any warranty for the Content.
2. This roundtable discussion merely was as an exchange of several opinions between financial professionals. All statements made by the persons participating in the discussion do not constitute an offer or an invitation to make an offer in regards to funds, hedge funds or any other financial products to any third party. Furthermore, any information is provided for information purposes only and does not represent advice on investment or any other form of recommendation by participants.
3. The Content that is provided and displayed is intended exclusively to inform any readers and does not represent advice on investment or any other form of recommendation.
4. The Editor is not liable for any damage, losses, or consequential damage that may arise from the use of the Content. This includes any loss in earnings (regardless of whether direct or indirect), reductions in goodwill or damage to corporate.
5. Whenever this Content contains advertisements including trademarks and logos, solely the mandator of such advertisements and not the Editor will be liable for this advertisements. The Editor refuses any kind of legal responsibility for such kind of Content.

YOUR USE OF CONTENT AND TRADE MARKS

1. All rights in and to the Content belong to the Editor and are protected by copyright, trademarks, and/or other intellectual property rights. The Editor may license third parties to use the Content at our sole discretion.
2. The reader may use the Content solely for his own personal use and benefit and not for resale or other transfer or disposition to any other person or entity. Any sale of Contents is expressly forbidden, unless with the prior, explicit consent of the Editor in writing.

3. Any duplication, transmission, distribution, data transfer, reproduction and publication is only permitted by

- i. expressly mentioning Nordic Business Media AB as the sole copyright-holder of the Content and by
- ii. referring to the Website www.hedgefonder.nu as the source of the information.

provided that such duplication, transmission, distribution, data transfer, reproduction or publication does not modify or alter the relevant Content.

4. Subject to the limitations in Clause 2 and 3 above, the reader may retrieve and display Content on a computer screen, print individual pages on paper and store such pages in electronic form on disc.
5. If it is brought to the Editor's attention that the reader has sold, published, distributed, re-transmitted or otherwise provided access to Content to anyone against this general terms and conditions without the Editor's express prior written permission, the Editor will invoice the reader for copyright abuse damages per article/data unless the reader can show that he has not infringed any copyright, which will be payable immediately on receipt of the invoice. Such payment shall be without prejudice to any other rights and remedies which the Editor may have under these Terms or applicable laws.

MISCELLANEOUS

1. These conditions do not impair the statutory rights granted to the readers of the Content at all times as a consumer in the respective country of the reader and that cannot be altered or modified on a contractual basis.
2. All legal relations of the parties shall be subject to Swedish law, under the exclusion of the UN Convention of Contracts for the international sale of goods and the rules of conflicts of laws of international private law. Stockholm is hereby agreed as the place of performance and the exclusive court of jurisdiction, insofar as there is no compulsory court of jurisdiction.
3. Insofar as any individual provisions of these General Terms and Conditions contradict mandatory, statutory regulations or are invalid, the remaining provisions shall remain valid. Such provisions shall be replaced by valid and enforceable provisions that achieve the intended purpose as closely as possible. This shall also apply in the event of any loopholes.

Participants **contact details**

Anders Blomqvist Ålandsbanken Abp

Tel.: +46 8 791 47 21

E-mail: Anders.Blomqvist@alandsbanken.se

Web: www.alandsbanken.se

André Havas Movestic Kapitalförvalning

Tel.: +46 8 120 392 33

E-mail: Andre.Havas@movestickapital.se

Web: www.movestic.se

Thomas Stridsman ALFAKRAFT AB

Tel.: +46 8 545 188 81

E-mail: Thomas.Stridsman@alfakraft.se

Web: www.alfakraft.se

Hans-Olov Bornemann SEB Asset Management

Tel.: +46 8 788 62 13

E-mail: Hans-Olov.Bornemann@seb.se

Web: www.seb.com

Björn Elfvin Coeli Asset Management

Tel.: +46 8 546 330 19

E-mail: Bjorn.Elfvin@coeli.se

Web: www.coeli.se

Jonathan Furelid RPM Risk & Portfolio Management

Tel.: +46 8 440 69 00

E-mail: Jonathan.Furelid@rpm.se

Web: www.rpm.se

Christoffer Dahlberg Estlander & Partners Zug GmbH

Tel.: +41 43 243 08 55

E-mail: Christoffer.Dahlberg@estlanderpartners.com

Web: www.estlanderpartners.com

Pirkko Juntunen Freelance Journalist / HedgeFonder.nu

Tel.: +46 8 533 386 88

E-mail: Pirkko@Hedgefonder.nu

Web: www.hedgefonder.nu

Björn Österberg: IPM – Informed Portfolio Management

Tel.: +46 8 20 19 29

E-mail: info@ipm.se

Web: www.ipm.se

Kamran Ghalitschi Nordic Business Media AB

Tel.: +46 8 533 386 88

E-mail: Kamran@Hedgefonder.nu

Web: www.hedgefonder.nu



Nordic Business Media AB

Corporate Number: 556838-6170

BOX 7285 SE-103 89 Stockholm, Sweden

Tel.: +46 (0) 8 5333 8688

E-mail: info@hedgefonder.nu