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Opalesque Round Table Series '12

HONG KONG

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Editor's Note

Hurdles and Rewards: High Frequency, Quant and Algorithmic Trading in Asia

It has not gone unnoticed that algorithmic trading has taken a large portion of the market volumes in the U.S. and Europe, a development that is about to be mirrored in Asia. While quant trading, high frequency trading and algorithmic trading are in the end all quantitative, they are often talked about as the same thing. High frequency trading (HFT) is a subset of quantitative trading, and in fact many low frequency trading strategies are traded via algorithms, which distribute orders in slices. Even minimal execution timings aren't just loved by the HFT ambassadors, also low frequency traders may be interested in reducing their execution to 50 milliseconds or even less.

Most high frequency trading consists of market making and spreading and will therefore make market movements less extreme while at the same time providing liquidity and bringing trading and execution costs down. These strategies are being supported by exchanges in both Tokyo and Singapore which have recently recognized the relevance and positive benefits. Still, high frequency trading is scrutinized in Asia, where market regulators make it harder to advance these markets and technologies through short selling rules, market connection and access issues, restrictions for foreign investors or currencies. That means you can't take a strategy you are running in the U.S. or Europe and just migrate it into Asia. Asia is a much harder environment to deal with, but that challenge of course comes with a reward, because once these hurdles are overcome, the traders are part of a growing and very interesting market.

The 2012 Opalesque Hong Kong Roundtable offers additional fascinating insights about:

- **How regulators inspect high frequency trading firms**
- **The human override: required or not? What is the regulators' view?**
- **Clouds everywhere? The regulators' views what can go into the cloud and what not**
- **Asian regulators confront managers on technology risk and business continuity planning**
- **Is China educating armies of professional derivatives traders? Eurex' Trading Labs in Hong Kong, Shanghai and Taiwan**
- **How Asian emerging hedge fund managers succeed: Know your cost base and capacity**
- **Why counter-party risk is "staggering" at the moment, and why many fund managers ignore it**
- **How hedge funds ended up being the banks' cheapest funding source**
- **Why investors will lose out if the trend towards using swaps continues in Asia**
- **The future of volatility trading: what investors are missing**

The 2012 Opalesque Hong Kong Roundtable was sponsored by Eurex and SunGard and took place in early May with:

- **George Castrounis,** Co-Founder Maple Leaf Capital
- **Paul Lo,** Head of the Eurex Representative Office in Hong Kong
- **Tobias Hallin,** Portfolio Manager, Seeker Advisors
- **Philippa Allen,** Founder, ComplianceAsia
- **Arjen Gaasbeek,** Head, Hong Kong office, Ingensoma Financial Group
- **Mark Wightman,** Global Head Alternative Strategies, SunGard

Matthias Knab
Director, Opalesque Ltd.
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Cover Photo: Hong Kong

Participant Profiles

(LEFT TO RIGHT)

Matthias Knab, Paul Lo, Tobias Hallin, Philippa Allen, George Castrounis, Mark Wightman, Arjen Gaasbeek

Introduction

George Castrounis
Maple Leaf Capital

I am the co-founder of Maple Leaf Capital. We started Maple Leaf ten years ago in London and opened our Hong Kong office six years ago, so we have been here for some time. We specialize in volatility and options trading strategies and are one of the longest running hedge funds focused on volatility trading. We currently manage $300 million. Our flagship fund is a purely quantitative long/short volatility strategy we call Revolver. That fund has now a 2 year track record with strong returns at low volatility, up 6% year to date and up 15% last year following a very strong 2010.

Paul Lo
Eurex Group

I am Paul Lo, Head of the Eurex Representative Office in Hong Kong. In Asia, Eurex Exchange has three representative offices: one in Hong Kong, one in Singapore, and one in Tokyo. Eurex Exchange is a global derivatives exchange offering a diverse range of investment opportunities including international benchmark derivatives on the EURO STOXX 50®, the DAX® and a range of sub-indexes within our equity-based offering. We also offer futures and options on the German government bonds, the Italian BTP, and the French OAT, which was recently introduced. Besides, we also offer Single Stock Futures and options on major European companies.

Tobias Hallin
Seekers Advisors

My name is Tobias Hallin. I am the Portfolio Manager of a company called Seekers Advisors. Seekers Advisors is an investment management company with principal offices in Hong Kong and Singapore. Founded in 2011, the firm specializes in high frequency trading and global macro. The strategies span across multiple asset classes and all geographical regions, and are automated using a high-performance computing infrastructure, with co-location at various locations around the world. Prior to that I was With a Swedish company called Pan Capital, also operating out of Hong Kong. Seekers advisors operates two different funds. One Global Macro Fund and one Algo/Blackbox trading fund.

Philippa Allen
ComplianceAsia

I am Philippa Allen, Founder of ComplianceAsia. We set-up in 2003 and have an office in Hong Kong and Singapore and service around 200 clients in the financial industry in relation to compliance and regulatory issues. Just over half of our clients are in asset management, and the next biggest client groups are stand alone broker dealers and banks providing services to the asset management community.

Arjen Gaasbeek
Ingensoma Financial Group

I am Arjen Gaasbeek, I am heading the Hong Kong office of Ingensoma Financial Group. We are part of the Ingensoma Financial Group in Korea and are active in High frequency trading and quantitative trading mainly into the Asian markets. We are mostly active in derivatives and cash equity. In the future we might consider launching a fund.

Mark Wightman
SunGard

My name is Mark Wightman and I am the global head of alternatives strategy for SunGard. In a nutshell, we are a Fortune 500 company providing a range of software solutions to over 400 hedge funds globally. Our products and services to this industry include decision support tools, portfolio management, risk management, fund, investor and partnership accounting and independent valuation services in both a hosted or local environment.

Matthias Knab **George, as firm originally based in the UK, what was your motivation when you set up an office here in Hong Kong six years ago, and what has been your experience here?**

George Castrounis: The rationale to that was principally to have an office in this time zone, because trading Asia from Europe or from the US is deficient to some extent since you do not have your ear to the ground. Time-zone wise, instead of being the first call or first discovery on any trading opportunity you play catch-up from Europe in the afternoon or work a graveyard shift from the U.S.

Maple Leaf trades global markets. I trade Asia, US, and Europe, and what is nice about Hong Kong is that you can actually trade those markets during what I would call awake hours. That means you don't have to wake up in the middle of the night and work abnormal hours, you are just working most of the day and still able to catch some sleep. That is a significant advantage when you trade global risk. Of course, I have done that from London as well where you effectively catch the afternoon Asia session, Europe, and the U.S., and from there too you can catch all three zones pretty efficiently.

We also found Hong Kong hedge fund friendly, from both the regulatory and the tax perspective. Hong Kong and Singapore are usually the two candidates that come on everybody's shortlist when it comes to opening an Asian office. From our perspective what was we considered an advantage for Hong Kong was that more fresh trading-related talent seems to come through Hong Kong than through Singapore.

George Castrounis

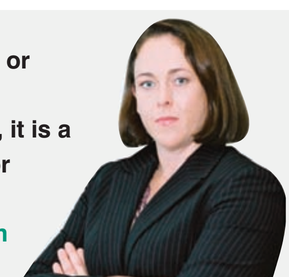
A final note is that when you work in Hong Kong, it is almost like you are living and working on campus. Your office, your flat, your gym, the restaurant you are going to that night are all within a five minute radius. As I said, trading global markets means you end up working during most of the awake hours and it is highly functional if there is very little down time in-between all those other activities. It's a highly efficient working environment.

Tobias Hallin Hong Kong is an easy environment to set-up in and employ. Hong Kong is a very fast, dynamic and growing city with a lot of people coming in. From a hiring perspective that means that even if you do not find someone today, by tomorrow there will definitely be people here that you would be able to employ. Hong Kong has overtaken Tokyo as the finance hub of Asia.

Arjen Gaasbeek If you want to be a market maker in Hong Kong, you need to become SFC licensed and therefore be physically present which was the initial reason to set up shop here. However, we knew that, once we started the firm here, Hong Kong would provide us with a good base, also from a hiring perspective. We also have an office in Korea, but experience shows that Korea is not always an attractive country to live in for some candidates. Besides that, most of the 3rd party contacts, like brokers, vendors and exchange rep-offices, are based in Hong Kong and not so much in Korea. So to keep oneself updated on the latest developments and meet market participants face to face, Hong Kong is a great place.

Philippa Allen: We see a lot of early stage managers who are trying to figure out where to locate or where to set-up a subsidiary. I think it is interesting that both Tobias and George referred to the personal element of such a decision, because ultimately when it comes to where you'll be living, it is a personal decision. Everyone talks about all the other things like the infrastructure, regulations or being close to China, but at some point it boils down to where people want to live.

Philippa Allen



Matthias Knab Let's talk a bit about algorithmic, quantitative and high frequency trading. Some of you are involved with that, and as we all know, there is a global discussion going on about it. What are your views and comments?

Tobias Hallin: It has not gone unnoticed to anyone that algorithmic trading is definitely a growing market segment and has taken a large portion of the market volumes in the U.S. and Europe over the past couple of years. This is a development we will probably see in Asia as well.

However, the Asian market regulators make it harder to advance these markets and technologies: you are dealing with short selling rules, market connection and access issues, restrictions for foreign investors or currencies.

That means you can't just take a strategy you are running in Europe and just migrate it into Asia. Asia is a much harder environment to deal with, but that challenge of course comes with a reward, because once you penetrate these first hurdles you are part of a growing and very interesting market.

We also see that the exchanges are starting to realize the relevance of this market. Tokyo launched their Arrowhead marketplace, and now the Singapore Exchange has started to offer new products. Every month, it seems, there are new products to trade. In the next couple of years, these markets will continue to evolve, trading will be easier and possibly stamp duties may be dropped in some countries. Take Korea as an example where you have different stamp duties for foreign and local investors. If Korea actually becomes a developed market, they will have to put local and foreigners on the same premises.

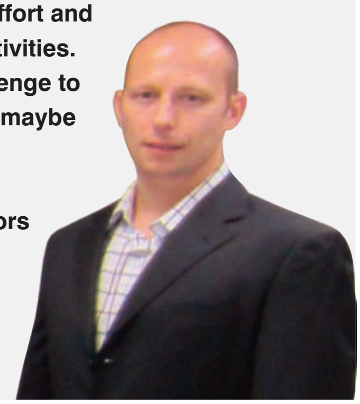
There are more inefficiencies because there are less players here, and even for a lot of the players it is not worth to trade certain markets because of stamp and also the difficulties in trading certain markets. It is not like in Europe where you can just call up your prime broker and "I want to trade the top 15 markets". If you want to do that in Asia, there will be a certain time and work involved with setting that up.

Tobias Hallin

Arjen Gaasbeek: I agree with Tobias, Asia is an extremely interesting region, but there are still a number of regulatory barriers as well as tax-barriers in some countries. Besides that, it seems that right now high frequency trading in Asia is being scrutinized and some of the regulators have disclosed new directives on imposing new rules which might limit our activities to some extent.

Korea for instance, was traditionally one of the markets trading firms had to be active in. However, this year it seems that there have been introduced a couple of rules that try to discourage trading, which obviously is not a good thing for a deep and liquid market. This will cause firms like ours to look around, and put more effort and resources into new markets, for example in India or maybe China in order to spread the activities. These countries do also have a lot of regulatory barriers, but it is a still an interesting challenge to start there because everybody else will experience these same barriers as well. Therefore, maybe one of these countries will be the next best Asian market to be active in.

Asia remains a very interesting region for high frequency trading and hopefully the regulators will realize that high frequency trading is not such a bad thing at all. The largest chunk of high frequency trading definitely adds liquidity to the market instead of causing volatility there.



Arjen Gaasbeek

Matthias Knab **Adding liquidity is one point in the discussion about high frequency trading. What else to do tell the public or the regulator in this discussion? And what are some of the arguments people raise against it?**

Arjen Gaasbeek: I hear a lot of arguments that high frequency trading firms would cause extreme market movements, whereas that all depends on what kind of strategies are being traded. Almost all strategies actually make market movements less extreme because most of the high frequency trading consists of market making and spreading. If there is already a result coming from this, it would be a mitigating effect on market volatility.

Secondly, high frequency trading firms do really provide liquidity. In the U.S. for example, the share of high frequency is more than 70% of market volume, so clearly that is a substantial amount of liquidity. I would not assume that Asia will be any time soon at a comparable level due to regulatory barriers though. As proof that HFT is indeed providing liquidity we could take the period that HFT firms were much less active in the market, during the Financial Crisis of 2008-2009, when regulators around the world imposed short-selling bans on some of the stocks. During that time the stocks with short selling bans showed broader spreads and much more intraday volatility than before as well as after the short-selling ban and also the difference in liquidity with stocks that were not affected by the short selling ban was obvious.

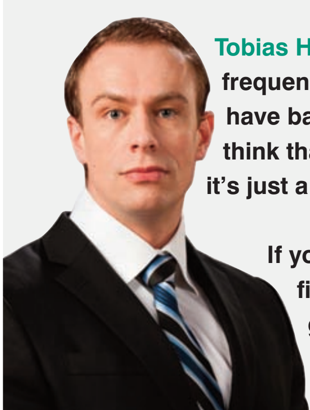
Arjen Gaasbeek

Philippa Allen Historically the cost of execution has been really high in Asian markets and it is still pretty high in a lot of them, do you see that the impact of high frequency trading will bring down trading and execution costs? That would be clearly an advantage for everyone.

Arjen Gaasbeek: High frequency trading does bring trading and execution costs down. Execution costs that the banks and brokers charge here in Asia used to be fairly high, but costs are coming down across the board. In the U.S. you can sometimes trade for a couple of tenth of a basis point which is still far from where we are here in Asia, however in a place like Japan and Australia rates have gone down substantially. So, costs do come down and will continue to go lower thanks to larger trading volumes.

In some markets though, there's still the issue of stamp duty which will cause volumes to stay lower, and rates to stay higher, than they would be when high frequency trading firms would be more active, but as the region develops that should be changing as well. Besides the broker execution costs, the spreads have narrowed considerably which might even be of more importance than the execution fees.

Arjen Gaasbeek



Tobias Hallin: If we do have too large movements in the markets, I am not sure regulation of high frequency trading is the right way to solve it, because certainly the exchanges are the ones that should have barriers in their systems, and many of them do actually and can suspend trading for example. I think that is the right approach to it, because when it happens you don't know what the cause is or if it's just a fat-finger causing the large market movements.

If you can execute 4,000 futures with one click, that can drop the index, and of course there will be firms then recognizing the discrepancies and saying "well, this does not seem right, we are going to trade on this." Who is the one at fault? It is not the people that actually see the market opportunity, but in the first place it's the large movement that is causing the discrepancy that is at fault.

George Castrounis: Matthias, You are talking about quantitative trading, high frequency trading and algorithmic trading synonymously, when all they share in common is that they are all different parts of quantitative strategies. High frequency trading is a subset of quantitative strategies, and another subset are low frequency trading strategies also being traded via algorithms.

For example, our strategy is entirely quantitative. There is no human override and the strategies are almost entirely executed by algorithm. However, they are low frequency. Certain strategies lend themselves to being executed by algorithm as opposed to being executed manually. High frequency strategies are the obvious candidates, as are some low frequency strategies such as ours.

Other subsets of quantitative trading strategies are black box, which I usually categorize stat-arb as, and rules based. Rules based strategies that lend themselves to being executed more efficiently by algorithms. High frequency strategies are often rules based as well and often combinations of both. Our strategy is definitely rules based.

When you think about the advantages of rules-based trading, it's no wonder they have been the trend in the market over the last decade. Rules-based trading isn't anything new, it has been applied for a long time, however technology now has made it easier for more people to employ it and basically is at the root of any successful trading strategy - back to basics 101 - plan the trade and trade the plan. These are the two parts to any successful strategy, and when you can optimize the trade the plan part algorithmically so that human error can get reduced, that makes it even more efficient as a strategy.

Stop losses play a vital part in risk management, so many people will have rules embedded into their strategies that trigger them should the markets fall for any valid reason or invalid reason. If a flash crash or any other event triggers stop losses you have embedded into your system, some people may attack and say that quantitative trading basically added to basically to the downfall of prices, whereas they were actually just implementing risk discipline in order to preserve the capital of the investors, which is good trading ethic.

When people talk about quantitative trading now, people tend to throw everything into one bucket and often lose sight of what is high and low frequency trading and what algorithmic trading is - which is a tool that both high and low frequency strategies use – and how it is applied. Knowing about those distinctions dispels a lot of the images that people have of the nasty trading computer being the bad guy.

George Castrounis

Tobias Hallin: I believe that in fact there is only a very small barrier between low and high frequency trading. Yes, a high frequency trader will be looking at the sub-millisecond time frame, leasing lines and or co-location at various exchanges as part of their strategy, but even someone who considers himself a low frequency trader may still be interested in reducing his execution to 50 milliseconds or even less. Unfortunately, often the high frequency traders are seen as the bad guys, whereas this discussion should maybe focus on algorithmic trading as a whole.

Tobias Hallin

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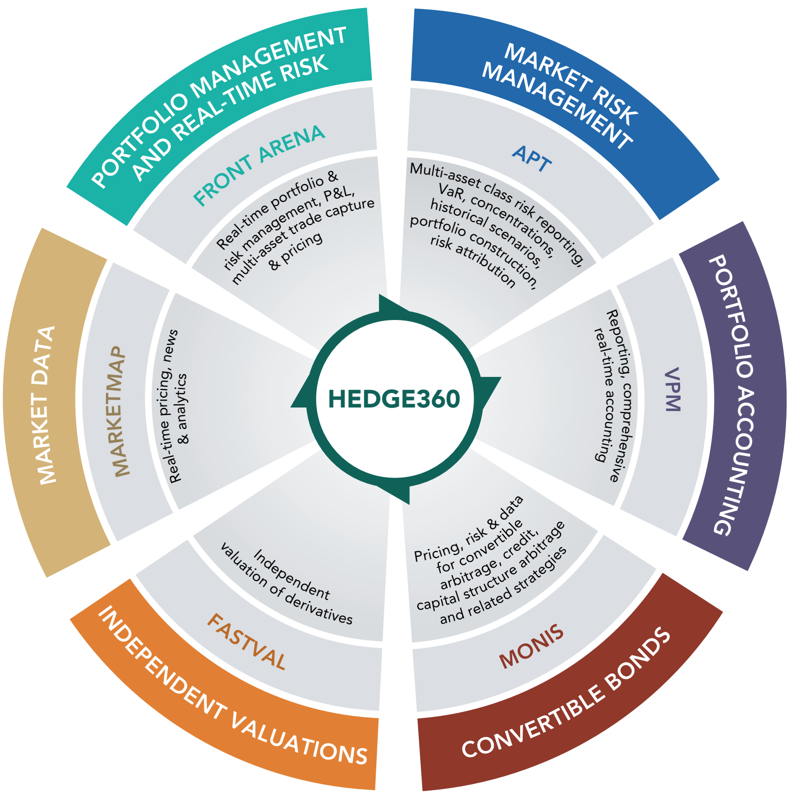

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Philippa Allen: Over the last year, we sat through two inspections for clients of ours who are in the high frequency trading strategy space. It was quite an interesting experience seeing how the regulator did not seem as familiar with HFT compared to the strategies they usually deal with such as long / short which they really do understand. So, one thing they asked for was a print out of three months of trading records. We said to them that "this is not really what you want, trust us." There was a lack of appreciation of volumes, sizes etc. and the practicalities of how to inspect such a firm. It is an educational exercise and helping them to get familiar with HFT. For example, the regulator here in Hong Kong has approached a couple of industry organizations asking for them members to support the internal education programmes for their staff by providing speakers on different types of investment strategies including algo / HFT models.

Another topic that received a lot focus both in Hong Kong and Singapore was the question of the human override: when does or when should the human override come in? The regulators seem to have this vision that the fund manager should be sitting there watching the screens and be ready at any time to step in and kind of change or interrupt the program. It seemed to me that there is a lack of appreciation of the technology and the math behind it.

Philippa Allen

Arjen Gaasbeek: What some people who do not know enough about this specific part of the financial sector do not see is that the human interference or override only comes in at the beginning when algorithms are designed and when trade limits are set in their algorithms and on the gateways to the exchange. Before you start, a strategy algo's are extensively tested in a test-market on all kinds of errors and issues that could occur. And to virtually every algorithmic trader applies, that risk management is the main pillar of any strategy so the human override will almost never have to take place during the period that algorithms are running in production environment.

Philippa Allen

I do not think that the sell side are helping you very much in this respect. The regulators are asking the brokers providing DMA or black box solutions how they know if they are being used as tools for market manipulation or not. The sell side guys are basically saying we cannot and do not know it, because we do not set the programs. So, I think there is an issue in that relationship which the regulators are finding difficult to get their heads around.

Paul Lo: Eurex Exchange has been doing a lot of training and educational programs in the region. One of the most successful ones is that we helped the Chinese University of Hong Kong to set up a Trading Lab. The Trading Lab is a simulated trading room. Eurex sponsored the University with our real time data. There are also other sponsors from the financial industry. The idea is to educate undergraduates the concept of trading options, futures, high frequency trading, market making, etc. The program encourages the students to analyze the data, to set up their own trading strategies, and to test the strategies in a real time environment in the Trading Lab.

Many of these students may not eventually become a trader, because not everyone is suitable. But they can work in risk management or in operations, and some students even indicated that they wanted to become a regulator. The correct concept of using derivatives, a financial tool, will be diffused to all sections of the market and to the community.

The program in Hong Kong is so successful that we are extending it into other countries. We now have a cooperation program with the National Taiwan University and have also been talking to the SAIF of the Jiao Tong University in Shanghai.

Paul Lo

Eurex believes in the ecology of the markets where you aim to have many different types of participants. We are committed to educate the industry and general public to understand the derivatives markets and styles of trading, including high frequency trading.

Matthias Knab **As an exchange, how do you view and deal with high frequency trading? Are there particular policies in place?**

Paul Lo: **Our exchange participants are very demanding. They want both speed and reliability, just like a fast car, which has a reliable braking system, but at the same time, consumes less fuel. The price finding mechanisms at our exchange is fair and transparent for all participants. Some like to trade in high speed. Some prefer to use non-speed sensitive strategies. Eurex provides a transparent, consistent and efficient trading platform for the market players to trade.**

By the end of this year Eurex Exchange will launch its new trading architecture. This system will be fast, reliable, and have a better capacity. Besides this new trading architecture, we will launch Eurex Clearing Prisma, a new portfolio-based risk management model to calculate the margin more efficiently. Eurex Group believes in innovation and also in investments made in technology.

Paul Lo

Matthias Knab **Mark, from your point of view SunGard technology, what do you see happening regarding high frequency trading?**

Mark Wightman High frequency trading has client specific needs from a technology perspective. Given the volumes, you build up your databases very quickly so you obviously have to have a high performance back-end in order to track your risk in real time.

Instead of being high frequency traders, the majority of our clients tend to be multi-strategy and macro funds, trading OTC products. However, from a P&L, pricing and risk perspective, exchange-traded instruments are a lot simpler. Being on-exchange, you can get a good hold of price and liquidity data as well as terms and conditions making P&L and risk calculations fairly straight forward. Of course, the key is to capture flows in real-time.

It comes back to what George was saying in terms of the semantics as we have a lot of clients who use algorithms, and many that trade quant based strategies, but less when it comes to high frequency trading per se.

Matthias Knab **Let us zoom in now on the next macro theme, which in this day and age, obviously, is regulation. What are some of the updates and trends regarding regulation in Hong Kong. There were some new rules, right, recently? Is there a way to sum it up?**

Philippa Allen There are a lot of new global rules. The SFC has been relatively good at holding still in relation to most to the rules they put into place after '97. Philosophically, I think, the SFC views '97 as being their watershed moment.

Philippa Allen: Their view is that Hong Kong had our financial crisis in '97 and we have not had it again, I am not quite sure about that, but that seems their view point. So, the rules are being little bit changed around the edges except in one key area that they have had to issue short position reporting rules to meet their IOSCO / G20 obligations. There has been a huge element of frustration within the industry over it, partly because to a certain extent if the exchange tweaked its own systems it could probably get that information, because all sales here are already flagged as being short. So, it is really just a matter of putting together the back end of the information. Also the reporting limit is a very low threshold.

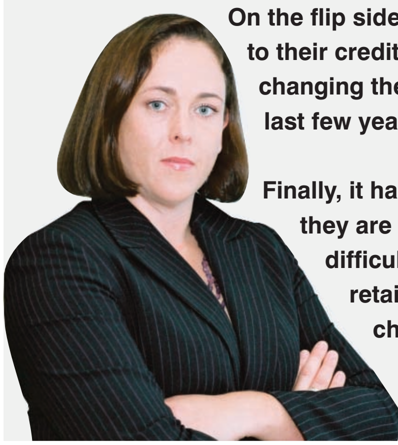
We are definitely seeing a trend where there is a move to swaps. Firms are saying, you know what, we are not going to do it, it is too hard, and we do not want to monitor it. Obviously, in the long run, the only people who win out of that are going to be the banks and the losers are the investors, because clearly moving to swaps is a more expensive way of doing the trades. It will be interesting to see how the SFC copes with that. Their remit does not cover the OTC market. So, it is going to be interesting, because potentially by implementing these rules they are pushing more trading outside their scope of regulation which is a strange result.

Philippa Allen

The other things they have been working on in terms of regulatory changes affect listed companies here. I think overall all of us agree that better governance for listed companies is a good thing in Hong Kong.

What is impacting people more in Hong Kong are the international changes that they are now going to have to deal with, because they have investors from the U.S. in particular or Europe, whether they are fall within the remit of the CTFC, for example, or the OTC derivatives clearing rules.

The consultation paper the SFC released on the OTC Derivatives clearing I thought was sensible and basically said that they cannot go out and be the market leader in this, they need to follow what happens globally. So, they are at the mercy of the big players and particularly where the U.S., European changes are at.



On the flip side, although the SFC is holding still on the actual rules and regulations, which I think is to their credit, but there are in fact changes in the way they implement their policies. They are not changing the rules, just their view on the rules. And there has definitely been a lot of that over the last few years.

Finally, it has become much more difficult to get through the inspection process now. For example, they are looking much deeper into strategies and everything around them. It is much more difficult to get licensed, which is a pain for new entrants. For the people who want to be in the retail space, it has become much more difficult to get funds authorized. None of this is rule change, it is all just an implementation policy change.

Philippa Allen

Mark Wightman

Managers in Asia face more regulation both in Hong Kong and Singapore, and they may well have to comply with all the international changes as well which has a lot of consequences. The associated compliance, accounting, investor due diligence and so on, is taking longer and gets more expensive. In the past, the fact that you could start a hedge fund here at lower set up costs and burn rate, was often seen as one of Asia's competitive advantages, compared to the established hedge fund centers of New York or London. What AUM do you think is the break-even point for Asian hedge funds these days?

George Castrounis I cannot give you any specific break-even point, because it varies from company to company and strategy to strategy.

In my mind, if more stringent regulatory measures means that a fund manager now needs to have a more thorough business plan, strategy analysis, business contingency and risk controls, these are very justified reasons to have higher costs. Conversely, I would argue that if a manager did not have any of these costs, then they were not spending money in the right places. I don't think regulators add any costs that aren't necessary, and contrary to popular belief, I think that abiding by a local regulator is not such a big deal if you are doing everything you are supposed to be doing, and if you are doing everything properly.

A regulator asks for certain information, that you have knowledge of certain risk controls, and that you abide to a set of rules. When people are now hooting and howling that this isn't "hedge fund friendly", I believe they are wrong. The regulators are forcing on the firms what should otherwise be a prerequisite. The unfortunate reality is that if they do not force those issues on them, more often than not those firms will not employ those disciplines. I believe everyone should really focus in this type of best practice and compliance, these are the real issues that should be addressed for the whole industry, and not how much impact high frequency strategies are having on the markets.

George Castrounis

Tobias Hallin As George said, a fund manager's break even will vary from fund to fund. I do think that Hong Kong is a great place to do it if you decided. If you do not have a lot of capital, Singapore has been quite welcoming for those types of managers. I do know that a couple of those managers will have to leave Singapore because they do not have enough money to actually operate out of Singapore anymore.

Mark Wightman: I agree with what George was saying about complying with a local regulator, and certainly the work the SFC here or the MAS in Singapore have been doing is very helpful and important, but the other aspect is the extraterritorial regulation.

The CFTC in the U.S. amended the rules and now requires commodity pool operators (CPOs) and commodity trading advisors (CTAs) to register with the regulator and to follow certain compliance requirements. If you have U.S. investors, you will now have to comply with FATCA's reporting requirements. Similarly there is AIFM coming in Europe, and so on. For example, the new short selling rules in Hong Kong kick in at the end of June, compliance with the new MAS rules commence when the FMC rules are passed by Parliament, and then there is Form PF for U.S. funds.

Mark Wightman

Arjen Gaasbeek In my opinion regulation is good and necessary but it does become an issue when your activities, logically speaking, would fall outside any category defined by the regulator, like proprietary trading. In our case we are still forced to fulfill strict rules implemented to protect external investors' money. We, as a proprietary trading house, are risk takers for our own money so a lot of the rules we are forced to comply with aren't making any sense. For example, we may sometimes have perfectly hedged positions but still need to reserve an overly conservative amount of equity as collateral, by virtue of rules that are designed to protect outside investors money whereas sufficient collateral for our type of trading is already lodged at the respective exchange clearinghouse.

Philippa Allen: I want to preface my statements here by saying that all the alternative managers we deal with are actually trying to follow the rules. They are not trying to engage in a kind of regulatory arbitrage and looking to set-up their shop in some odd jurisdiction so that they can get around rules. Fund managers actually want to be regulated and want to be in the right space.

To your point Mark, for example the MAS is introducing a new licensing regime and the fact is that the industry is mostly supportive of it. There are a lot of people in Singapore who want to be regulated, they do not want to be exempt.

The problem now is that fear that has crept into regulation, which is a politically driven fear and the fear that regulators are going to be blamed for something going wrong again. This means that you are getting a huge amount of focus on really, really small things that do not relate specifically to the bigger picture, or the larger, professionally run firms.

This is more a philosophical problem. The fact is that regulators are not distinguishing the world you guys play in, which is a professional's market and there is no investor that comes and invests with people like you who does not put you through an incredibly rigorous due diligence. You are not leaking into the retail space; your funds are not being sold to people who do not understand what they are.

If the regulators globally could step back here and say, you know what let us a make a big boys club or professional's world and let them play and then protect the investors that need protecting, the moms and pops on the street. This would make everyone's life a lot easier rather than trying to take you guys and squeeze your operations into a set of rules that are designed around protecting somebody who was mis-sold something across a bank counter.

The other thing I would like to mention is that having worked with Asian hedge funds now for 10 years, the managers that strike me as being successful are the ones who already at the beginning have had a good understanding of what their capacity actually is. The do their tests and studies and decide to cap the fund at say $300 million. The number could also be one billion, the important point here is to define this at the start what their strategy allows them to do. You have to define this number based on trading and liquidity aspects. There are far too many people who in their early stage define high capital raising targets [because it looks good on the business plan] and just assume they will be able to invest all of it. Historically, there is evidence against that in Asia.

Philippa Allen

Tobias Hallin I want to refer again to what George said earlier when we talked about regulations. You have to do all of the right things and you have to do them right. If a fund manager has taken all the proper steps when setting up, he would have taken care of the capacity question as well. And because you have done your work and due diligence, you know how much money you need and how much money the strategy can take.

However, we also have to keep in mind that market characteristics change over time. We can clearly see that after 2008 volumes in the market have come down. For a firm like ours that trades in and out of thousands of instruments that means that we do not actually require the same amount of capital as we would have in 2008, because the volumes in the market just are not there. You have to adapt dynamically.

Philippa Allen: Coming back to the smaller or start-up managers, we often find that many of them actually don't know what their run rate or cost base is. There are a lot of people out there who do not know how much money they are burning up every year. That means it is difficult for them to figure out whether they are profitable as a management company and are genuinely running their business efficiently or not.

Tobias Hallin: **If you do not operate with a lot of capital; Singapore has traditionally been quite welcoming for those types of managers. I do know that a couple of those managers will probably have to leave Singapore because they do not have enough money to operate out of Singapore, once the new rules are in place. Most of them are moving somewhere else. I believe this new regulation was supposed to pass in early 2012 and the discussion is still ongoing as no final date has been set.**

Tobias Hallin

Arjen Gaasbeek But will they really move or will they just decide to become licensed?

Tobias Hallin A lot of them will move, because they do not have the capital and are thus unable to fulfill the capital requirements.

Philippa Allen : **Singapore has got 671 exempt fund managers, that is clearly way too many of them, and I think the whole point of MAS delaying the introduction of the licensing rules is to say to people look why do you not have the balls to shutdown now, because otherwise you are going to be forced to because of the increased capital requirements, infrastructure and costs.**

You could argue that in general the Asian regulators are still pretty conservative, and going back to what I said originally, they are still kind of in a 1997 sort of framework. They are definitely more protectionist than from many other countries, they are definitely more old fashioned. One example of that is where risk passes - it is ridiculous that in Hong Kong risk passes on settlement. For execution brokers or prop traders this has a huge impact, it means you have to carry a lot of money in your financial resources, even though it is clear that the risk is actually with the clearing house by that stage. In other Asian jurisdictions, there are structural inefficiencies in the way the markets operate caused by regulators. The exchanges are well aware of this. The exchanges generally find one of their biggest obstacles to doing business is actually the regulatory framework they work within.

It is easier being offshore and being a remote member of the Singapore Stock Exchange to get the connectivity to Singapore than it is being onshore in Singapore, because it is incredibly difficult to get a license from MAS. It is much more advantageous for a firm to be offshore than onshore, because once they are there, their capital requirements are enormous, and it could take them up to a year to get licensed. The MAS has only ever licensed 17 stand-alone broker dealers, everybody else is like a proper investment bank. Those sorts of things make the type of business you guys do much trickier.

Just as an aside, I think one of the problems in Singapore is that the MAS still has that consultation paper out about the licensing regime, and then they issued another one about risk capital requirements for all licensed entities in Singapore. It is about 189 pages long; the math in it is horrible. Basically, it looks like it will make it more expensive for people to do business in Singapore, because they are going to need a higher capital component to take account of things like counterparty risk, position risk and so on.

This second paper looks like a banking or Basel III kind of document and it counteracts the roll out the fund manager licensing regime simply because it also deeply affects the fund managers. To me, Singapore has created a sort of consultation paper clash, and if this situation is found to cause any delay, it should be resolved.

Philippa Allen

Matthias Knab **Paul, are there any regulatory developments that you from the exchange side have to deal with?**

Paul Lo There are a number of regulatory changes in Europe that keep my colleagues in Frankfurt very busy. Here in Asia, both Hong Kong and Singapore have published a consultation paper on OTC derivative clearing, at the G20's request. The regulators in Hong Kong and Singapore will set up rules and regulations regarding OTC derivatives trading, clearing and reporting. In Europe, Eurex Clearing schedules to launch our EurexOTC interest rate swap clearing services in June, mainly to serve the European market.

In Hong Kong, Eurex is prepared to extend our membership. At the moment Eurex can only admit non-clearing members in Hong Kong. Because of some unfortunate instances in Europe and in the U.S., there is a growing demand for Eurex clearing services out of Asia, in particular from Hong Kong and from Singapore.

Responding to the demand from the market, we are prepared to offer Eurex clearing membership to financial institutions in Hong Kong. Right now, we are assessing the local Solvency laws. Eurex Clearing will soon submit an application to the SFC to obtain ATS authorization and to provide clearing membership to corporations in Hong Kong.

Paul Lo

Our move makes sense. We receive good support from the regulators both in Hong Kong and in Singapore. They also welcome this idea. Overall, Eurex Group does not encounter negative impacts to its business developments due to regulatory changes in the region.

Mark Wightman In Asia we always end up comparing Singapore and Hong Kong. It seems the new FMC rules in Singapore are in many ways mimicking the structure we have here in Hong Kong, which historically has had a stronger overall regulatory framework for hedge funds in terms of the necessity of registration.

One of the things that we find relevant and is a cause for debate among clients is that the new MAS rules are asking managers to have a risk policy. Of course, as George mentioned, risk management should also be defined in the business plan, but what is interesting is that the MAS's discussion paper contributes significantly to the usual discussions you would have around risk.

So, yes, of course you have got various forms of market risk, credit risk, counterparty risk, liquidity risk and so on. A lot of it does still seem to be bank focused and in the hedge fund industry, we are a lot smaller, more nimble, and we may have proportionally more OTC products depending on strategy. The other area of interest for me is that there is an entire section on technology and business continuity planning (BCP) risk, which I think is the only regulator I have seen with such wording in there.

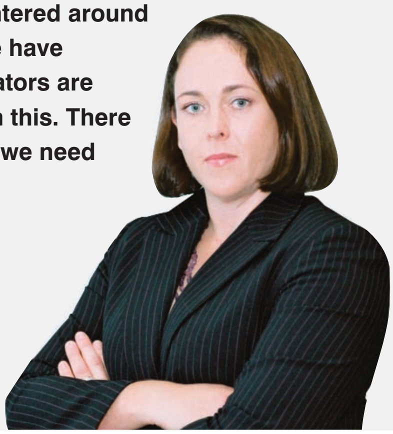
We are increasingly seeing clients ask questions about hosting and the cloud. Globally at a macro level we are seeing a lot of technology moving from traditional, locally installed solutions, to hosted solutions, often because it is a quicker time to market and "simpler". For most hedge fund managers it means you can outsource your technology, and really focus on growing your business and increase revenue.

Mark Wightman

Mark Wightman: As the regulator is now specifically commenting on this area, we find managers questioning what this means for them. I think MAS is ensuring managers consider the pros and cons of the hosted environment and sensibly focusing them on BCP risk to avoid unforeseen problems in the future. Not all hosted solutions are the same, and it's important that funds understand the security of their systems and data, and how recovery happens in practice should a disaster be declared.

Philippa Allen: Regarding cloud computing, most regulators do have rules about keeping the records in the jurisdiction that you are in. Even in the U.S., everything regarding documentation is centered around old fashioned record keeping where you can point to your server or file rack, and those have everything in it. Those rules have not changed, and of course the problem is that regulators are extremely far behind where the industry operates, and so they are really struggling with this. There is no global regulator, there is no one that can globally go to every jurisdiction and say we need the information here in Singapore because we are doing an inspection.

So we need to pull it down from the cloud. I can see why they get confused by it, they certainly have told one big bank recently that they are not allowed to use the cloud for certain activities, and they have to get everything back into local Singapore servers, which is interesting.



Philippa Allen

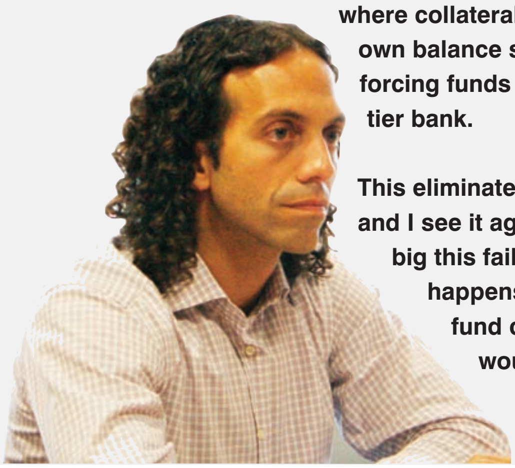
George Castrounis: Mark highlighted two areas that have had increasing focus from regulators. The first is counter-party risk and the second is technology risk, and in my view those are absolutely the right places for the regulators to be focusing on. This shows to me they are doing their job and it seems like they are doing it well or at least making the right steps.

The truth is that counter-party risk is staggering at the moment - none of us in our professional careers have really experienced such widespread risks. But what makes it really dangerous is that most managers are ignoring those risks, which is why the regulators are addressing this area because the managers have not.

Maple Leaf ran a very successful fund that peaked at $1 billion in 2008, when we decided not to continue the strategy. That decision was solely based on the counter-party risks, because OTC trading - which was more than 80%, 85% of our trading activity - stopped making sense when you factored in hedging costs related to protecting our collateral amounts held by the counterparty bank to support those OTC trades.

This is an aspect of our industry that nobody really focuses on or speaks about: banks use hedge funds as a hugely efficient funding source for themselves because they resist solutions like tripartite agreements where collateral can also sit with another institution. Instead they want your cash on their own balance sheet, so your money ends up commingled and a subordinate credit, forcing funds like ours to pay 500 bps a year to hedge subordinate credit against a major tier bank.

This eliminates the viability of a lot of trades, and what some managers then opt to do, and I see it again and again, is to say "well, it is JP Morgan or it is Deutsche, they are too big this fail" or whatever the latest catch term is, but that is wrong. If a disaster happens, then probably those banks' depositors would get saved, but their hedge fund clients who have subordinated cash collateral as part of their OTC demands would not.



George Castrounis

George Castrounis: What makes the whole thing worse is that the collateral amounts per trade just keep going up, they are only going one way leaving the managers in a position where they have to pledge this huge cash collateral with no flexibility, it is not my cash, it does not have my name on it but it sits with the bank, so I am lending this money to a bank but I am not getting paid the 500 bps a year that the capital markets get paid. Of course, the banks are not going to change that, they make billions a year in efficient funding from funds and from anybody else they trade with, therefore they vehemently resist change.

That is something managers need to wake up to, and if a regulator will force them to realize that maybe they do have counter party risk or cannot ignore it anymore, the funds need to factor in those costs, and manytrades won't be employed any more. Right now, some funds do neglect these risks, and if the regulators put in more stringent rules, I am in support of that.

Let's talk now about technology risk. All three of us here from the investment management side are very quantitative and technology focused. We obviously therefore are going to have potential exposures if the lights go off. I mentioned before that technology has made it easier for firms to adopt quantitative strategies and certain technology-based strategies, but they have to do so with discipline and great care. For example, they should have pretty robust disaster recovery solutions that cover all kind of situations. What if somebody outside the building is doing some drilling and knocks out the fiber optic cable that is feeding your office line?

George Castrounis

Philippa Allen It happened here in Hong Kong about two weeks ago.

George Castrounis: It has happened to us in London! Our office in London is across the street from the U.S. Embassy, that also gives you some ideas you have to focus on.

All these broader risks need to be addressed, solutions and procedures need to be documented, they need to be proper and tested. For example, disaster recovery solutions should not be theoretical, they have to be real. If they are not and the regulators expose that, then applaud them as they are doing their job, protecting the public. These are the real issues to address. It is not about high or low frequency strategies doing this or that, but about losing monies in the wrong way because your lights went off and losing control over your positions while being fully exposed to the markets. Again, kudos to the regulator because they are focusing on OTC counter party risk and technology risk, which in my view are the two single biggest regulatory/oversight risks in the market at the moment.

George Castrounis

Investors are addressing the same issues and do a good job in general when conducting proper due diligence. They won't sign cheques unless the plumbing works. The larger and more professional investors have benchmarks to compare you against. They are probably also invested in the larger, institutional-type funds with adequate disaster recovery solutions. These investors will be able to recognize a sub-standard operation. They know the right questions to ask just by virtue of having asked them hundreds of times, and over time they know what standards are really required. Again, the application of technology and technology risk is an important area and a good thing for regulators to focus on.

Tobias Hallin Just back to what George was saying about technology risk, I think it is very important and each and every fund that has any sort of technology.

If it is just a simple order management system or if it is actually algorithmic trading environment it is a question that I think it is actually good being addressed by the regulator.

It is the same way with co-location where your algorithm is running on a remote machine at a remote location and your P&L is relying on the ultra low latency to the market. What happens if the connection to that server goes down, how you are going to effectively manage risk, is that strategy going to continue to the trade? What are the security measures in place if you lose connection to that machine. Those are important questions to have answered beforehand, do you have a backup connection over VPN, what type of measurements -- if the line goes down, does the strategy automatically shut off?

And if the regulator asks those questions at an early stage, kudos to them, because not only our investors are going to ask those question, but you could also potentially save yourself from a meltdown where a strategy just continues to trade while it could happen that these types of connections can be offline for longer periods of time.

Matthias Knab **George, you are active in the volatility space, please give us an update about this niche.**

George Castrounis: Volatility as a whole has a been a tricky spot for hedge fund investors and has not fully taken off as an asset class. This is partly because the space can be sometimes confusing for investors in the sense that all that volatility strategies are bucketed together because they share something in common which is the word volatility, whereas in fact those strategies can be entirely different from each other. You find some are long-only or short-only, some are long/short, some are fundamental, some are quantitative. The issue is really that you cannot lump all those strategies together and you must differentiate them as you do with other hedge funds strategies. Investors must understand not only what is the instrument traded, but how it is traded.

As it stands today, people have realized that long-only volatility or short-only volatility are not a free lunch. Both those kind of vol funds will have very poor performance at certain points during a cycle, and that has to some extent given volatility a bad taste for some investors. Therefore we constantly try to educate and inform investors about the many different aspects of volatility trading.

**The strategy that we focus on which is interesting because it focuses on the dislocation of the volatility space as a whole, and it is not something that is more or less prevalent now than it was five years ago. This dislocation is caused because the users of derivatives, like the bulk of Paul's Eurex listed option clients are people that use derivatives for insurance purposes or for leverage. Those people are ultimately focused on the directional outcome of an asset (whether it goes up or down), not its volatility. They are the pension funds of the world, corporates, retail, governments, large long-only asset managers, mutual funds, traditional hedge funds and so forth.
They use derivates to execute a directional view or to get leverage.**

They far outstrip the supply provided by volatility managers at funds or volatility hedge funds, multi-strat volatility managers, exchange market makers, and prop desks at banks. The numbers are dramatic, saying that directional folks outstrip the vol folks by 50:1 is conservative, it's probably a number like 100:1, in which case, without question, empirically volatility trades at premium.

There are hundreds of academic papers to support that volatility trades at a premium. This creates edge to trading from the short side, but not arb, because we know when you trade short volatility only and in too large size you blow up every two to five years. Ironically if you trade long volatility only, you also tend to bleed to death every two to five years.

George Castrounis

So there is edge in the volatility space as a result of this dislocation and vol trades at a premium, the same way insurance trades at a premium. Insurance companies are successful businesses overall and what do they do - they trade short volatility, they sell puts. Each of us around this table owns insurance on our cars, or house, or life, or health are we over paying for it and do we know we over pay for it? Yes. Do we still buy it? Yes. And so it is just human nature to be long insurance for peace of mind, and what insurance companies do well is that they diversify their risk and they size positions appropriately, so they are not exposed to just one policy.

This is similar in approach to what we do, and that edge is best extracted by having a portfolio with both a long volatility and a short volatility component but with an overall short volatility bias. Again, this edge, this overall supply/demand volatility dislocation is something that has been and will be with us for a long time before the ratio of directional to volatility focused users of options balances out.

Actually to be honest I do not think you could get there because it comes down to human nature, a genetic element which creates a bias to own insurance, and that bias will always be there unless people change the way they look at risk. That creates a lot of opportunities, particularly across all asset classes, it is pervasive, so we trade in equities, fixed income, currency, commodity.

George Castrounis

Matthias Knab **Can you tell us more about your investor base?**

George Castrounis: I think I could probably speak for most Asian hedge funds here that generally our assets tend to come from outside the region. For example, there is obliviously a lot of money here in Hong Kong and a lot of investors are very active in trading their own portfolios with a very high appetite to risk. They typically do not prioritize the preservation of capital. That means if you are a hedge fund that appeals to typical broader hedge fund investor base - financial institutions, pensions, large fund of funds etc. - and therefore your strategy targets 12% to 15% returns on low volatility and you present that to a local investor, you have lost them. It is something they want to make on a weekly turn in an IPO, so your fund is completely unattractive to them in general. As a result of that, the investor base for Asian funds still tends to be more the western entities that want to have Asian managers in their strategies. Our investor base at Maple Leaf tends to be spread out between Europe, U.S. and similar places.

George Castrounis

Philippa Allen: I believe it is a misconception in Europe and the U.S. about these big pools of money in Asia waiting to be invested into hedge funds. There was obviously a lot of money in Asia, but at this point it is not broadly being directed to the alternative universe. There are some bright spots though, for example some local sovereign wealth funds, particularly the more emerging sovereign wealth funds like KIC in Korea, have an increased interest to investment into alternatives.

Then there are also sizable jurisdictions like Taiwan for example that still have not liberalized their pension market and don't allow larger mandates to be managed by non-Taiwanese managers. Australia on the other hand has lots of pension money to invest, but a lot of that stays invested in Australia. Therefore, as George said, a lot of the local hedge funds' capital is coming from outside the region.

Matthias Knab **What other developments, trends, products or innovations coming out of Asia right now?**

Tobias Hallin Asia is growing – Period. New products, more markets become developed which makes it easier to invest into, new exchange engines and the expansion of the financial sector in Asia as a whole. The trend is – people are realizing this and want a piece of the cake.

Paul Lo In the last two years, Eurex Exchange has been launching new European fixed income derivatives. These products have been very successful. In April, we launched futures contracts on the French OAT. It is already very successful with good trading volumes. Also we see a well-balanced mix between the buy-side and the sell-side. Open interest is increasing. The French OAT product is expected to be very successful in the future.

Two weeks ago, I was invited to speak at the China Derivative Analysts Forum in Hangzhou on Eurex derivatives on government bonds. For me, the experience is a bit unusual. In the past, retail investors have rarely looked at bonds, not to mention bond derivatives. Right now, because the China Financial Futures Exchange has been very enthusiastic to launch their own Chinese government bond futures, all of a sudden the Chinese retail investors become very curious and want to know more about what government bond futures are.

That is why Eurex Exchange was invited to speak in two sessions in the same forum to share our experience in trading government bond derivatives. In both sessions, the room was fully packed with people. This morning, I just received another invitation to speak in Beijing on the same topic - government bond derivatives and trading strategies.

I was told that the securities regulator in China, CSRC, now becomes the driving force behind exchanges, and asks them to launch new products. This is also a very interesting phenomenon that I have never seen before in China.

Right now, the CSI300 index futures is the only financial derivatives in China. The next one will likely be the Chinese government bond futures. The exchange is preparing for this launch. There are trade simulations going on. I am optimistic that this contract will be launched soon.

Another interesting product for the hedge fund industry is Eurex Clearing's newly launched Client Asset Protection (CAP) scheme. Since the default of Lehman Brothers in 2008, there is growing demand from clearing members' clients for mechanism to protect their assets at the clearing house level.

CAP offers the service that allows non-clearing members to have individual clearing models in our clearing house. That means the clients' assets will be segregated from the clearing member's proprietary positions and become portable in the event of a clearing member's default. If a clearing member defaults, the end clients who joined the CAP can move their margin collateral and positions without interaction with the administrator.

Paul Lo

The CAP is already in place. We launched the service last year and it is now available to clients in the UK and Germany. We continue to extend this service to non clearing members in other European countries and other regions.

Tobias Hallin Within Asia, the Singapore Exchange seems to be leading when it comes to product innovation here. Some of their newly launched products allow you to trade certain country futures that would be very hard to trade because of those specific countries' market regulations. For example, you can even trade certain Hong Kong stocks in Singapore, so in regards to Asian products they are taking the right steps at the moment.

Arjen Gaasbeek

Arjen Gaasbeek: This is right, SGX seems to offer very low entry barriers to products which are nearly identical to other products listed in markets that sometimes do have fairly high entry barriers. This provides for an easy route to gain exposure to these markets but then through SGX.

George Castrounis: Speaking very broadly, alternatives and hedge funds will continue to grow in Asia and also globally. One factor is the spin-out of talent from the banks who are no longer able to take proprietary risks. I see that as a continuing trend.

And more importantly, I think the world realizes that managing your money efficiently is no longer done by a balanced portfolio of equities and fixed income bonds and cash, because the relationships that existed historically that allowed people to believe that this was a safe strategy, have broken down. Investors globally have realized that portfolios structured like that are no longer diversified enough and that the inclusion of different alternatives strategies form a core part of any sensible portfolio.

As our industry grows globally, also the Asia-Pacific region will grow because it is a core part of any global risk. More and more markets here open up. Of course, the big deal is mainland China, it has been talked about forever but nobody knows when or if at all it will happen, but It is definitely happening in other parts of Asia. That means more risk is allocated and we will get more growth in the sector as a whole. We see that regulators are asking the right questions, so that hopefully we'll also have fewer surprises, fewer blow-ups and so forth.

George Castrounis

Tobias Hallin

Asia is still emerging, so the more countries open up and create liberal financial markets, the easier it will become for investors to come in and participate in the opportunities here. The region is poised for further capital inflows, which not only benefits the local markets but the entire financial sector as a whole.