

Opalesque Roundtable Series '18 CONNECTICUT

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Editor's Note

Connecticut is home to the third largest concentration of hedge fund talent in world. Many of the original and most successful hedge fund firms are located here.

But the industry is also constantly renewing and bringing forth impressive talents and seasoned investment professionals starting new firms, some of which are represented at this 7th Opalesque Connecticut Roundtable, sponsored by the Singapore Exchange:

- 1. Nancy Davis, Managing Partner, Quadratic Capital
- 2. Michael Syn, Head of Derivatives, Singapore Exchange
- 3. Spencer Lampert, Chairman, CIO, Exelauno Capital Management
- 4. Don Rogers, Founder and Managing Partner, Stride Capital Group
- 5. Rick Doucette, CEO, CIO, Antecapio Investment Partners

At the Roundtable meeting in Stamford, CT, the group produced extraordinarily important insights on a wide range of subjects:

- How Stride Capital aims to <u>disrupt the way seeding has been done in the past</u> (page 20-21). Why <u>talent is not enough</u> (page 11, 29). What strategies are attractive for Stride? (page 11)
- How can investment managers keep their edge in a changing world? What should investment managers learn from top athletes? (page 8). How to determine an investment manager's edge (page 14-16)
- How data science has changed Formula One racing implications for investment management (page 10-11)
- The vast majority of asset managers, at least 95%, manage risk through stop losses. But <u>is there a better way to protect against losses?</u> (page 13,17-18). Why most portfolios are short liquidity and short volatility (page 13). What is liquidity risk, really? (page 14)
- Uses and limits of Al and Machine Learning in Finance (page 14)
- The four market conditions every investor should analyze and consider (page 16-17)
- What is the treasury function for a long/short fund, and why is it important? (page 19)
- How are the financial marketplace rules developing in Asia? (page 20, 31-32)
- The position of the investor today (page 21). How can investors mitigate the issue of subjectivity? (page 6) Bespoke services as the future (page 25). Understanding capacity restrictions (page 24). The brilliance, limits and Roman roots of the incentive fee (page 26-27). The growth and evolution of the US family offices (page 27).
- The invasion of marginal talent: Hedge funds and the investment counseling business of the late '60s, early '70s (page 23). What is the caliber of investment talent entering the market now? (page 28-29). What is a "stranded asset manager"?
- How investment platforms of the future will disrupt financial services (page 30-31)

Enjoy!

Matthias Knab Knab@Opalesque.com

Participant Profiles



(LEFT TO RIGHT):

Michael Syn, Rick Doucette, Laurent Partouche (SGX), Nancy Davis, Spencer Lampert, Don Rogers, Matthias Knab

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Message from Bruce McGuire, President of the Connecticut Hedge Fund Association:





Bruce McGuire

Connecticut is home to the third largest concentration of hedge fund talent in world. Many of the original and most successful hedge fund firms are located here, including Bridgewater Associates (the worlds largest), Paloma Partners, Tudor Investment Corp., Viking Global, and Lone Pine. The industry is concentrated in Greenwich, as it's picturesque seaside setting, easy access to New York City, word class schools, clubs, shops and restaurants, make it the perfect place to live, work and play.

Like others in the financial industry today, we have our issues. Connecticut suffers from a bloated state employee workforce, combined with the richest benefits package anywhere in the US. Our leaders have repeatedly failed to fund our pension liabilities, and not surprisingly, this toxic combination has lead to chronic budget deficits and a

search for new taxes. In 2017, the Connecticut Hedge Fund Association successfully fought against a bill that would have imposed a 19% surcharge tax on anyone earning income in investment management. Such a tax would have been catastrophic to our financial services sector (especially hedge funds), many of which would have sought shelter in more fiscally sound and tax friendly states. Thanks to our efforts in 2017, the legislature this year has proposed the creation of a hedge fund task force to "make recommendations for modification of state statutes to encourage the growth of the investment management industry in this state." We are justifiably proud of our advocacy, and the new attitude taking root in Hartford. This is not a time for complacency however, as many suspect that the task force is really a "trojan horse" designed to reignite the wealth inequality and carried interest tax debate. We encourage all Connecticut fund managers to engage with us so that we may continue to advocate for your interests.

To help cement our position as a global financial center and the "hedge fund capital of the world", we are partnering with the Town of Greenwich and Ray Dalio of Bridgewater to produce the Greenwich Forum, a sort of "Davos for hedge funds". The Greenwich Forum will be an annual gathering of industry elites who will come together to discuss industry trends, debate global financial policy, and find new business opportunities. We thank Matthias Knab and Opalesque for being such a great friend to Connecticut, Greenwich and the global hedge fund industry.

Introduction

Michael Syn

Singapore Exchange

I am Michael Syn from the Singapore Exchange where I am Head of Derivatives. I started my career as a market maker and trader in London. When I moved to Singapore, some 10-15 years ago, the markets industry wasn't so well developed so I eventually headed into retail fund management, as COO of a regional bank platform. That was really a very interesting time. It allowed me to learn about the various local markets within Asia and their fund distribution mechanics.

Around eight years ago I joined Singapore Exchange (SGX). SGX is the national market infrastructure of Singapore. Given the small size of the country we have ambitions beyond the domestic market, and therefore view the viability of our jurisdiction as being more important to the institutional end-client than the exchange itself. Just like the airport is more important as a hub infrastructure than the airline.

Today there are three exchanges in Singapore, which is now firmly developed as a multi-market jurisdiction unique in Asia. The ambition is now more to be like what London represents to Europe, an international financial centre for Asia offshore markets.

So what is it that Singapore as a jurisdiction seeks to achieve for investors, for issuers, for capital raisers? It is to act as an offshore hard currency marketplace that provides an infrastructural advantage to international investment dollars flowing into emerging Asia. By and large, apart from Japan and Australia, much of what's interesting in terms of investment factors in Asia has access restrictions. The big influencing factor for SGX in terms of product development is capital restrictions.

We are now 20 years on from a series of memorable events including the Asian Financial Crisis, which began when the Thai government, challenged with huge foreign debt, had to release the Thai Baht. We're also almost 20 years on from the LTCM recap and Suharto stepping down in Indonesia, but we haven't seen a major twin crisis (banking plus currency) in regional Asia since then

Even the GFC in 2008 was considered in Asia to be a "WFC", a Western Financial Crisis.

At SGX, we focus on policy and operational risk management. A key aspect for us is when will Balkanization of the major capital regimes reach a tipping point, when things start breaking? We would say that from a macro perspective we have probably seen peak globalization. Davos man and woman – their time is up.

This doesn't mean that Asian trading regimes have broken up. But China's sphere of influence has increased, the US gave up on TPP, a weak Dollar is squeezing. This gets a little closer to preconditioning a mindset for capital flight and EM crisis. From a scenario preparation point of view, this is the framing that we are looking at within the next three to five years for our risk management infrastructure.

Rick Doucette

Antecapio Investment Partners

My name is Rick Doucette. I started my career in the investment consulting business a long time ago and got into the hedge fund world back in 1990 when it was still embryonic. I continued going through a number of iterative steps in terms of evolution and innovation, doing things like building out a multicurrency portfolio management system because it didn't exist at that time, or a risk management system that actually worked for people that were long and short instead of just long.

But over the 27, 28 years I have been in the hedge fund world, the primary focus has been allocating capital across multiple strategies and then risk managing on a multiple strategy basis.

A lot of the experiences that I have had over those years have been ones that were beaten into my head with a 2 x 4. So they are particularly poignant and painful even as I think about them today.

My main practical experience over the last 28 years was primarily equity long/short strategies. We also had exposure in other capital markets – rates, credit, currencies, geographic diversification – but the specialty that we really focused on was long/short. So we were not looking to take exposure in the form of market direction but were rather looking from a spread perspective, and in particular the fundamental spread business.

One risk is having a biased perspective. That is one of those 2 x 4's that have hit me in the head, the more subjectivity you allow into the process, the greater the margin of error. As a consequence we try to focus on keeping the portfolio simple in terms of the number of decisions we make in order to mitigate the issue of subjectivity.

Don Rogers Stride Capital Group

My name is Don Rogers. I am the Founder and Managing Partner of Stride Capital. We are private equity investors in asset management firms. However our approach is different from the traditional seeding model, and in fact **we aim to disrupt the way seeding has been done in the past.** But rather than getting into that discussion now let me stick here with my background.

Stride Capital is version 4.0 of my long involvement investing in emerging managers. My first exposure was through my father's role as co-founder of RogersCasey. This was one of the first consulting firms that grew to advise hundreds of billions of dollars in institutional capital. RogersCasey was an early investor in many firms that went on to become industry leaders, such as PIMCO, Bridgewater and many others. These firms were started by entrepreneurs whose aim was to run money away from the investment banks a major structural shift that happened in the industry in the 70s and 80s.

In the 1990s, we started a family investment partnership to invest in new and emerging entrepreneurs. While it was not our intent, this naturally dove-tailed with the growth of alternatives. We made a number of day one investments as an LP, not yet as an owner, that were extremely successful. Given this long history of early investing, I realized that the asset management industry is constantly evolving, and by becoming a partner in an emerging business, an even higher return could be earned than simply being an LP. This led me to link up with Michael Dell's Family Office in the formation of SkyBridge Capital.

Matthias Knab:

I remember - that was when SkyBridge was still a seeder, right?

Don Rogers:

You are right, that's a little lost history, but correct, SkyBridge was started as a seeding business originally. That was where I, career wise, cut over from just being an LP to being more of a private equity owner in asset management firms and a partner in building successful businesses. As SkyBridge began the transition to becoming a fund of funds, the firm broke away from the Dell Family Office and I left to start Stride Capital. Under Stride we made our first investment in 2012.

Today, Stride has 1 billion dollars of affiliated assets managed by five portfolio companies, with a sixth being added in Q2. We continue to believe the asset management industry is evolving and undergoing dramatic change right now, which I am sure we will talk about here. Stride has raised new capital recently, and we are actively looking to put new capital to work in new investments.

Nancy Davis

Quadratic Capital

My name is Nancy Davis. Five years ago, I started a firm called Quadratic Capital, which I named after the quadratic equation. That equation, you probably know, describes convexity, so you might guess that we are an options-focused asset manager.

I know a lot of people switch off when they hear about options. Some people may think they are boring, or too complicated. But I love this stuff. I've been working in options my entire career. I actually started developing my style of options trading totally on my own when I was in college. So studying and trading options is something I really enjoy.

I started on Wall Street at Goldman Sachs and worked there for 10 years. I was initially a sell-side options trader, but I did not enjoy being a market maker. I wanted to buy when I wanted to buy, not when someone else wanted to force me to.

In 1999, I was invited to join what was then called the "risk-arb" desk. Really, by then it was more of a prop trading desk. After a few name changes, the group came to be known as Goldman Sachs Principal Strategies, or GSPS. As a trader in the group, I was trading options for the firm's account. In 2003, I was promoted to be the head of credit, derivatives and OTC trading for GSPS.

In 2013, I started Quadratic Capital and hired a few of my colleagues from Goldman. In order to launch, we went through the seeding process which was a whole new learning experience. Now we want to grow and develop our firm into an asset management platform.

And so I am really excited about talking with you about the macro perspective. We trade cross asset classes – commodity options, FX options, rates options, equity index and ETF options, as well as some corporate credit options.

Spencer LampertExelauno Capital Management

I am Spencer Lampert. It's very interesting that there are many similarities to my story and Nancy's story.

On the entrepreneurial side, I started my company Exelauno Capital in mid-2017. Exelauno is a Greek word for "to march forth", and that was in fact what I was doing, because I had spent the prior 30 years at Tudor Investment Corp. I started working with Paul Tudor Jones in the spring of 1987. He hired me to start trading long/short equities for the firm. It's a matter of public record that he and in fact we all did guite well that year.

Paul was convinced that the stock market was going to crash and that when it crashed, the authorities will look for a scapegoat. Back in 1987 he thought that the scapegoat just might be S&P futures trading, because in those years one could have argued you didn't really need them. You needed government bond futures to help protect the banks. You needed commodity futures and options to protect the farmers. S&P futures, really? Who are you protecting? So Paul figured that he needed to be able to put money to work in the actual stock market, because obviously they were not going to outlaw the capital raising function of Corporate America.

Paul was then right about the crash – we had a great year as I mentioned – and he was right about the looking for a scapegoat. Fortunately and correctly, they chose portfolio insurance, which Paul had been on top of. It wasn't just the pricing analog to 1929. He had estimated the size of portfolio insurance and knew from trading the markets that it couldn't take it, and that was his big precipitating factor.

My personal background was risk-arbitrage prior to joining the firm, and I stayed trading long/short equities for Paul. Then in 1991, Paul asked me to work directly with him as head of global macro research. That was funny in a way because at that time, Paul was really the global macro department back then. We had just begun diversifying, hiring other global macro managers. We hired some managers from Goldman Sachs for the UK office and also Jim Pallotta to build out our US equity division.

So I ended up working side by side with Paul who is a very introspective portfolio manager, particularly during draw-downs, and that resulted in having to analyze Paul Jones as a trader. I became affectionately known as his swing coach in addition to head of macro research. This of course created a great dialogue between Paul and myself, and also ingrained in me the knowledge that managing money is really a business that requires concentration, patience and discipline. I used to preach this to all the younger PMs at the firm over the years that we are not just throwing darts at a dartboard. There may be environments where that works, but in general that's not what we are doing.

This is a professional job and in many ways very much like being a professional athlete. We can get paid an ungodly amount of money based almost entirely on our results, and like all the great professional athletes, it really requires a disciplined process throughout the pre-competition, the competition and post-competition phases. Every outstanding athlete keeps detailed statistics on what they are doing right, or when they are doing things right and when they are doing things wrong.

Personally, I am not a golfer. I play, but I am really not a golfer, but I do know that Tiger Woods keeps statistics on which fairways or how many fairways he made and how many greens in regulation he hit and probably a myriad of statistics he'll be collecting, just like pitchers and basketball players keep such data, and so for us this kind of data is also important as part of one's trading process. I would preach that we act like athletes and carry statistics.

Working so closely with Paul over so many years was a great learning experience. His risk discipline and the way he approaches risk is really quite good. He does it almost innately.

So I went from long/short equity desk to Paul's right hand and director of macro research, and then after a few years I said, "Paul, this is all well and good, I think I can do this macro trading thing as well." And initially he wasn't keen on it, and the reason for that was that he thought we work so closely together that essentially I'd have the same portfolio, so why should the firm allocate capital to me in a separate allocation?

But I proved my point to him. I said, "Let me just take commodities and I will prove to you we are different traders." And so I took commodities, I started making money trading commodities and they gave me more money. And then we expanded to emerging markets and I made money, and they gave me more money, and all the while I am proving that not only was I not correlated to Paul Jones, I wasn't really correlated to most of the other PMs we had been adding at the firm.

Before long I was one of the senior portfolio managers at the firm and in the early 2000s they came to me and said, "This is all well and good, but you can't do both jobs, head of macro research and senior PM." And I said, "Well, how can you tell, you keep giving me more money, I must be doing something right?" And they laughed and said, "No, that's not the point, but fiduciarily, you have to choose." So I chose being just a portfolio manager at the firm.

Then in 2016, it was time for me to leave the firm. Over all those years, of course many things had changed, I had been there for nearly 30 years. And so at the end of the first quarter of 2016 I left, and as you can figure, it was a difficult day. Imagine working at a firm from its beginnings to becoming a highly esteemed firm; we had over 400 employees at the time, and \$12 or \$15 billion under management at the time, but it was time for me to move on.

So I had a one year non-compete and I wasn't actually ready to retire. I love this business. I get up every morning wondering where the markets are, what's going on and why they are going. Furthermore, everything that I heard about global macro made me realize that this was no different than the countless other investments cycles I had seen in the past 30 years: Returns are great, money flows in, headcount goes up, too much money goes in, returns degenerate, money flows out, headcount goes out, and they all cycle.

As I began my non-compete year, I thought that very rarely do you get a chance to take advantage of the old adage of buying when the rest of the world is selling.

So, I was sitting there thinking that I have lived these investment cycles for so long and that I know where global macro is right now. It's at the bottoming part of a cycle, and it is not a coincidence to me that this was happening as the world's central banks were coming out of this huge experiment called QE and negative interest rates, which was in nobody's mind five years earlier. Negative interest rates actually does not compute, but the very fact that the US is leading the world out of it at a time when global macro sounds like it's bottoming part of a cycle is not a coincidence to me. The two go hand in hand.

So I decided to reengage the investor base, and I listened to them. The large multimanager business model does not seem to be appropriate at this time. There are many aspects, which I imagine we will talk about here today, where the money management business has gotten incredibly easier, certainly over my 30 years. The only cost that's actually gone up is regulatory costs, but outside of that, every aspect of this business has gotten incredibly more efficient and cheaper.

The only thing I had to do was then to figure out how to start making money in global macro again, because it had been a challenge since 2009 or 2010. And so I adjusted my process, much like in baseball. There is something called the defensive shift – if you happen to be a big hitter who hits to one side of the field predominantly, the defense has finally learned that they could move almost everybody back to that side of the field and make it harder for you to hit. That player's operating environment then got harder, and also global macro's operating environment got harder. I would challenge anyone in this room to tell me an industry whose operating environment hasn't actually gotten harder in the past five or six years.

The challenge then becomes to adapt, adjust, and figure out how to hit the ball to the other side of the field or become a better batter, and that's what I did for global macro. So I opened up a personal trading account, which I hadn't done in 30 years. It was mind-blowing to me what the brokers provide the retail investor now. For example, being able to trade cash currencies on the fly in a retail account was shocking to me.

I fine-tuned my process and I started regaining the profitability I had been known for at the firm. I said, "Great, I like the environment, I like my capabilities, and so it's time to reengage!", and so I started Exelauno and we just began onboarding managed accounts, and that's where we are today.

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Matthias Knab

Everyone's introduction has been absolutely fascinating and gives me plenty of options to continue our conversation. Let's maybe start with what Spencer said about top money managers really having to be like top athletes in the sense of having to record and analyze what you are doing. To put this out as a broader question, what can you do as money managers to keep your edge in a changing world?

Spencer Lampert: There's actually a lot we can do because technology has advanced so much. And the best example I can give of that is how I monitor existing trades and post-trade analysis.

As I said earlier, we now have more efficiencies in the money management business, one of which is the cost of a lot of data has been driven down to essentially zero. So that informational edge that people used to talk about in global macro is not a function of data anymore, or access to data, or the ability to buy data. It has nothing to do with that, but for me it's the data-driven analysis of my own trading that is important.

I had a light bulb moment watching the New England Patriots play, and if you have ever watched them play, when they don't score a field goal or a touchdown, the cameras immediately turn to the sidelines and show you Tom Brady sitting with a Surface Book on his lap and a coach on his side reviewing what they just have done and didn't obviously score on.

And I watched that and I realized that this is exactly what I need to be doing on a real-time basis with my trading. So I now have a Surface Book Pro which has an electronic notebook and a software called OneNote. It's incredibly powerful.

I track every single one of my trades. I keep a running journal of my thoughts during the course of that trade. I learn lessons and hyperlink to a lesson's page just so that I can go search on things like a stop out. I can go search on anything I might have been thinking during the course of a trading, find those trades that fit any search criteria as a way of learning to become a better portfolio manager.

These type of tools and software didn't really exist until recently, and for me that is just one small aspect or example how technology has helped.

Matthias Knab

You mentioned some real-time supervision and an immediate feedback based on data. Earlier this year I was a guest at ABN AMRO's Alternative Investor Forum in Amsterdam, and they had a guest speaker named Mark Gallagher who spent 32 years in senior management roles within Formula One motor racing. It was absolutely fascinating to learn where Formula One is today.

When you ask what factors are important to win a Formula One championship, people think of the cars, the tactics, and the drivers. But did you know that each racing car is now basically full of sensors, probably more than an airplane, and that **while a Formula One race is going on, for each car in the race there are eight data scientists looking at data real time** so that they can even give feedback and instructions over the radio to the driver if any system degrades or if he needs to change or adapt his driving or tactics.

So it's the same thing in this high performance sport where it's now also all about data, real-time monitoring, and how to learn and adapt from that for a better outcome and to beat the competition.

Don Rogers: I think this analogy is a really neat one. I think about that a lot too, but without overstretching the analogy the really important question is **what game are you playing.** So if you choose to become a Formula One racer, you better have a car with all the sensors and your data scientists, otherwise you're crazy to get in that game because you are going to lose.

The same holds for investing where I believe every investor needs to understand what game he or she is getting into. There are sectors with overwhelming competition, talents, capabilities, technology and systems. Competing there is really hard, and the opportunity for alpha is narrow. Even if you are the best, and the biggest winner, the returns may be limited.

So when we look for new opportunities to invest in, we believe it is critical to know what game you're playing and who you're playing it against. While some markets require scale, and data, and technology and systems, others don't. If you look for them, there are market opportunities that are just less competitive and more inefficient. It can be more like shooting fish in a barrel than fighting over scraps on the floor.

When we look for new opportunities we want to understand whether returns are more likely to be generated. We like to understand how competitive that environment is, and is this team entering that market with a severe disadvantage or are they entering an environment with an advantage.

Matthias Knab Can you give us examples of what would be things you find interesting and attractive?

Don Rogers: A really interesting example is a seed investment we made a few years ago in a small cap activist. Activism has been a very successful strategy.

Managers that have had success with that style have grown. As those managers have grown, they are now competing against bigger players in a pool that keeps getting smaller. As firms move up market cap, there are fewer target companies, but more competition. Also, the legal teams at these bigger corporations are deeper and more sophisticated, so it is harder to affect change.

Meanwhile, in small cap land, there are many more target companies, many more companies that have problems and issues but far less able competition. To execute an activist strategy, a manager needs some real unique experience and specialization which goes far beyond just analyzing a company, but dealing with boards and understanding how proxy fights are done, etc. These are things that are not common for the average everyday buyer of a stock but a real specialized skill-set. And in a world increasingly influenced by ETFs and other passive capital flows, being able to affect change and influence an outcome is really valuable to generate uncorrelated returns.

So when we see a *structural reason for an opportunity* to exist and a team with hard to develop specialization that gives them an advantage, that starts to look really interesting. We think a manager focused on smaller cap activism is just fishing in a pond that's more stocked and less competitive. We also believe a portfolio manager focused on that space has tools in their toolbox and skills that other investors don't have. The combination is a greater likelihood to generate higher returns. And that's the way it has played out, with this particular manager generating high teens net returns for the last 3 years.

Michael Syn: Since the USP for applying technology is taking some process which can better systematized, that is used to being implemented or advocated by a human being, but instead automating and repeating it with hardware and software. Then the best kinds of money management strategies to apply this approach would probably be mean-reversion strategies, where I can bring the law of large numbers into play. It would be best to do that in very small time horizons, so that I can do that trade, or execute that idea, say a million times an hour in small size every time. The P&L consistency of some HFTs was well noted in their IPO disclosure documents. But over the last five to eight years, crowding and collapsing volatility has led to the shrinking of their multi-billion dollar revenue pool to a fraction of that.

A lot of engineering has gone into questions and approaches around: can I take strategies which worked over days, weeks, months, and make them work at a hundred microseconds? Can I make it work across all markets in the world and put it in one big correlation net so if I happen to be long S&P and I am short some iron ore, it's ok because my book that's watched over by a machine, and a team of engineers is feeding and watering the machine."

What's been fascinating for us is to understand that this Formula One style pursuit of data maximising returns leads to a certain other sort of agility in scaling the capacity of a single strategy manager, and also in speed to market in selecting/discarding managers. Overcapacity built up quickly and we're well into the countercycle just as volatility appears to be bottoming out.

These prop trading firms manage with constant capital. Whatever money they make during the year, they extract and they don't take in outsiders' money. If someone runs a billion, he stays at a billion day from year to year, and he's always got 1-2 billion sitting in a liquid account so when opportunities (or issues!) arise they can fund. There is therefore a capital allocator, sitting on top of the algos and on top of such regime shifts.

Are these type of data-driven strategy now implementable in slower time scales? Yes of course, there have been quantitative CTAs for the longest time. There is also a lot of AUM expansion through smart beta, where the strategy is implemented through index construction. The biggest trade-off for these customised and passively algorithmically assets will be liquidity airpockets when factors break.

The real money Asian investor is somewhat barbelled: infrastructure, ships, property, agriculture. *Asset allocation isn't healthy when it's driven by the tyranny of financial oppression.* Too much fiat and too many managed markets, with Japan as a prime example. There we have a Central Bank that actually buys equities and says to the market that 10 year JGBs will be pinned at 0% yield and 0% vol. With a finger on the scale, saying "I will mark vol at zero so that we can reflate the economy out of this singularity"... well, let's see how the exit strategy plays out.

So the risk manager's question is then what strategy do you put in place for when that finger comes off the scale? What price for liquidity risk premium if you are managing an openended investment?

Nancy Davis: I definitely agree with a lot of the statements that Michael just made. And Don's point about managers being trapped in a more competitive pool resonated with me. I want to share a bit about our process and strategy, because I think they both touch on these issues.

The reality is that the vast majority of asset managers, I would say at least 95%, manage risk through stop losses. *People talk* about stop losses like they're great tools and reliable and how risk should be managed. But from my point of view – that of the options nerd – these stop losses have locked you into a short gamma profile. What I mean by short gamma is that when you have a long position and it goes against you, you stop out by selling your long after it's gone down. So, by definition, you're

selling low. Or when you are short something and it's going up, you stop your loss as it's going up. This means you are buying high. Selling low and buying high isn't what we're supposed to be doing as managers, but we accept it because it's better to sell low than to sell even lower. But neither is really great.

When people are long optionality, they are long gamma, and when they're short optionality, they're short gamma. And a stoploss kind of risk management model is really running short gamma. That's what stop-losses are.

When I started on the Goldman prop desk, the partners didn't want to hear what your Sharpe Ratio was or what your VaR was. The most common risk management question I was asked was very simple: "How much can we lose?"

I guess that way of thinking about risk stuck with me. At Quadratic, we construct all of our positions using options and that means we have our maximum loss already known and quantifiable. We do our "stop loss" when we put the position on. We also don't have to assume liquidity. We don't need to trade to avoid the loss. Because if you're relying on a stop loss model, you still have to be able to get filled on your trade. And if everyone is wanting to do the same trade, watch out on where you get filled.

I also agree with Michael that a lot of investors are going into less liquid vehicles as they try to diversify. Whether it's direct lending, private credit, or infrastructure projects – we all know these investments have no liquidity. It may be some time before you can't get your money out to meet requirements of pensioners or meet payments. But despite – or maybe because of – the fact that so many investors are going in this direction, I have even more conviction in my firm and being able to offer something that is truly different and avoids the illiquidity problems in these positions or in standard stop loss models. Every single position we put on has a defined down-side that is limited to option premium. And then of course we benefit from the asymmetry of the payouts, so when we are right on something, we are selling when it's gone higher and not when it's gone lower.

Let me give you another example. Think about when you were in school and learning math, and you might see an equation that has a plus first but then later there's a division problem in the equation. So here you need to know to go to the division first, and I feel like I found that out in the sense that our strategy works better for investors because instead of relying on stop-losses which means first the manager loses your money and then only afterwards do they start to manage a risk, I feel we have changed that order of operation and we risk-manage the portfolio when we construct it and then we profit take when the positions work for us and not against us.

The result of this is actually a positive gamma profile. So I think Michael's point about the unreliable assumption of being able to press a button and get out of a position when a stop loss is triggered is spot on. Even more so when everybody is trying to do it the same way and at the same time. **This is why I think most portfolios are short liquidity and short volatility.** They might not be explicitly short volatility, but by the very nature of stop-losses they are short vol.

And so, again, this is why our process at Quadratic is really different. I like to know with certainty what my max loss is at the time I put on the position, rather than worrying about trying to get out of my position along with everyone else.

So, I think Michael really raised an important point about the move out of liquidity and the related risks. It's especially interesting hearing you talk about it as an exchange because, after Bear and Lehman, everybody wants to be on the exchange. But a lot of the fixed income markets are still OTC. It doesn't mean that they are not liquid. In some cases they are wildly liquid. But you have diversified counterparties and not just one central counterparty. I think that's another challenge in terms of educating investors. Just because the last financial crisis looked like that, it's not necessarily going to be the same thing the next time.

Rick Doucette: My world, the fundamental long short space, is different than Spencer's or Nancy's. I'm in the business of stock selection and security selection on a long/short basis. And to Spencer's point about cycles, *you and I have seen a lot of cycles, but what I also have seen a lot is that when people say that we're at the end of the cycle we often aren't, or if they say "this the new paradigm", it's never a new paradigm.*

I think Matthias raised a good question regarding the edge of managers, because this is basically what we try to determine understand all the time. How do you maintain edge while the market place is constantly changing? You therefore have to constantly be thinking about what edge means within the framework of the current market and what you are doing.

And when we talk about liquidity, *liquidity risk to me is crowding* and it has different effects with different types of investment styles. So in equity strategies in particular this can fall into two categories – one style is more trading oriented, which is mean reverting, and the second is more investment-oriented with more of a momentum characteristic.

Crowding then has a different effect on each of those strategies. On the trading side, the more money that pours into the same trades effectively constrains the ability to make any kind of return. With the investment approach it's the reversal that can kill you. Your position goes up and up, and then when it reverses everybody can get wiped out, so here the momentum reversals are kind of the focus.

To be more specific now, when I try to determine edge, I focus on three things: One is, *do you have a variant perception of what you are doing relative to what everybody else is doing and can you explain what that is and why that's a benefit?* So that by nature is the first step that generally can keep you away from the crowded trades.

The second is about an *informational edge*, but that informational edge is becoming increasingly more difficult to maintain because the flow of information that people can access now has expanded exponentially. Also individuals don't have the ability to absorb this volume of information fast enough to be able to process and identify where opportunity is and then react to it before it's already discounted in the marketplace. That's where over the last probably 4 or 5 years the quants have had the big edge given that they have the ability to technologically capture information, process it, model it and execute quicker.

Therefore, one of the things that we have been focusing on is how can we speed up the portfolio manager and analyst's perspective on what information is relevant in the marketplace, how that affects their thought process and how they should respond to it. That's where technology comes into play, more specifically I have put a lot of time in the **Al and Machine Learning** space as a potential solution to this problem.

My sense of Al and Machine Learning is that many people are pushing to use the technology as a decision-making function. However I don't look at it as a decision-making function. I don't think that the technology has advanced to the point where you can rely upon it as a decision-maker within a fundamental discretionary strategy. The margin of error is still in a sort of 15 to 35% range. If you are quant, that makes sense. With a strong base of risk management, you can still make money being right 52% of the time, but as a fundamental discretionary investor that's too big a margin.

The way I look at AI is that it's a tool that can also be adapted to the fundamental manager and his or her style or approach to using information. Everybody has their own approach to investing. What you want to do is you want to identify what or how they use information, what their edge is, and then *train a system to mimic their approach*. All you are really doing is creating an *intelligent trolling device* for information. It's just trolling in the methodology that the manager has been using himself. When it identifies the typical catalyst that makes the manager interested in the information, it will highlight the information and pop a message back to the manager so they can do their due diligence to confirm or

deny whether the information the model identifies reflects an opportunity to invest, and then they can act on it if it is consistent with that viewpoint.

Having such tools allows managers to expand the horizon of information that they can access, process it faster and also be much quicker in terms of executing the idea.

The third and last piece of the puzzle to me is the behavioral piece. I agree with Nancy's comments on risk management systems being reactive. They are based on statistics, and so the problem is that you are predicting the future based on what happened in the past. You are not anticipating risk.

I look at risk management at two levels. At a really base level risk management starts with the portfolio construction process and depends upon your approach. Our approach is long/short, so what's the biggest risk in a long/short strategy? Well, the biggest risk in a long/short strategy is you have an imbalance somewhere, whether it's a volatility imbalance, or factor imbalance, wherever it might be. Therefore, within the context of constructing a portfolio, you need to differentiate between risk that is something that you don't understand or isn't a part of your thought process versus risk that is part of your thought process.

You want to create a balance in the exogenous risk on the long and short side so that there are no unwanted surprises. We assume that the risks associated with the opportunity that you are looking at are skewed in your favor by doing proper due diligence.

But, there is an inherent weakness with portfolio managers and that's a behavioral one. When they do really well, they get overconfident and when they get overconfident they make bad decisions. And when they are losing money, they lose their confidence, and again they make stupid decisions.

Spencer explained that part of his risk management is having special procedures to look at his trading.

I look at kind of the behavioral expectation of the managers that I have. What I mean by that is that I'm looking for points in time where their behavior is at the extreme tails of the spectrum. For example, when they are overconfident – meaning they have just gone through a period of relative outperformance that's been astounding, they think they are God and they want to allocate more capital into the marketplace – I'm looking at them and suggesting that the proper question now is about the sustainability of their return, not the expectation of achieving a greater return. Because usually at the point in time that you gain the confidence to invest additional capital, it's probably closer to the end of that sustainability of return than the beginning.

So, what I try to do is to provide a kind of perspective offset to the times when the manager is prone to make subjective errors, which is a human trait and a natural function of everybody. Nancy mentioned that people have a tendency when they lose money on a stock, the first thing they do is they cut the stock. And I agree, the stop-loss concept to me doesn't necessarily make sense. One of the things that some of my peers may have missed is when you are managing long/short money, by the nature of being long/short, you're capacity constrained. It's not a function of how much borrow do I have available to me as much as what's the friction of setting up and taking off positions in my portfolio?

When I look at that kind of approach, I'd like to anticipate risk. I don't understand how you can define an arbitrary cut such as down 3% as an absolute exit point for reducing exposure or exiting a portfolio. Sometimes people are early. Sometimes they are down 3% in their book and when you look and analyze it you find the trade driving the underperformance is well constructed and reasoned, but the firm may force the guy to liquidate his portfolio and walk out the door. I believe there needs to be a level of communication with the manager that kind of recognizes the risk of missing an attractive opportunity with that approach.

But I think liquidity and the permutations of liquidity in terms of what liquidity means is paramount. It affects how we think about managing money. To me, it's kind of who is there and how much of it is there. Back in the old days, there weren't enough hedge funds to create critical mass where the momentum reversal was as problematic. Today, you have trillions in hedge fund assets. How many people do you know on the stock side, but even on the macro side, that do things like having idea dinners where they get together, they all talk about each of their ideas, and what do they do? They all go back and put the ideas they heard at the dinner in their portfolio. The byproduct is that they drive themselves into *positions of commonality*. When there is a crack in the thesis, the guy that's central to the thesis, that everybody else is piggybacking, understands it well enough to realize that this crack doesn't make sense and reduces his risk of exposure to the name. But the rest of the

people that have tagged along might not realize that there is a crack in the thesis until it's a problem. And then all of a sudden when they realize it's a problem, they are bailing and trying to get out of the risks at the same time.

So, you need to think about risk at a number of different levels. The access to information, the behavioral pieces, and crowding effect are all key risks you need to think about when you're allocating capital.

Spencer Lampert: The point you just raised about either multi-strat environment or that industry dinner with the group think probably explains best why I'm typically negatively correlated to my industry.

I believe one of the edges is in the process, so I end up applying an understanding in a historical context what certain cycles mean directionally for the various markets and each business cycle, interest rates cycle, dare I say inflation cycle has different implications for the odds of directional moves during the course of those long-standing cycles. What I enhanced in my process was a *mean reversion type of approach on an entry basis*. This means I wait until those groups of funds you mentioned push this particular market the wrong way as defined by the odds of a given cycle.

So I wait for them to provide the liquidity for me to get in. The other consideration is that I only trade the most liquid markets. I don't trade a lot of emerging markets. My portfolio could be 100 times larger than I am today and still get out of my positions in a day or two. So, I address your concerns in those two ways.

Rick Doucette: I love the thought process because I think the same way. To me, the most important thing about any manager I am invested with is the investment process. I don't care what sleeve they are operating in, whether they have a sector or industry specialty or if they have an asset strategy specialty. I don't care. But what I do look at is how they invest, what their investment process is.

As I said earlier, the investment world falls into sort of two categories in terms of time horizon – a short-term trading orientation and a longer-term investment orientation. And in the long/short business, the things that are really important to us are understanding what the market conditions are and how the manager's investment process relates. It doesn't matter to me if market goes up or down, but it is important to get a sense of the existing market conditions.

I actually think of **four market conditions**. One is *trend*, obviously, that matters less to me. Second is *volatility regime* which does matter to me. Then there are *stock price return dispersion and correlation of stock prices*, the latter two

being somewhat interrelated. So, when I think of process, market conditions drive me to allocate capital to the investment process that is the best fit to the current market conditions. To give a simple example of a down tape marketplace, my volatility regime is going to be higher, my stock price dispersion is going to be wider, and my stock price correlation is lower. That's an ideal environment for a trading strategy, because now you have got breakage in the marketplace that's sufficient to cover your execution cost, and you have volatility which in combination allow you to make money. But that won't work for investment-based strategies because the problem is that the marketplace has a tendency to be choppy and volatile. Investment-based strategies tend to work better in a trending marketplace. They like that stability.

An upside market has lower volatility, tighter dispersion and higher correlation. It's much better for an investment strategy. Trading strategies do not do as well because of the lack of dispersion and price correlation. In that scenario, the breakage of stock price isn't big enough usually to cover your execution cost. And if it is slightly better, you do not have enough volatility to create enough instances to generate a return that is meaningful. In the end, you need time for the fundamental differences between stocks to manifest themselves... And the only way you get time is to extend your time horizon and move more to an investment based strategy.

So, I bucket my managers based on the investment process my managers use. That helps me determine how I kind of skew the book. It also makes my life a lot easier. Compare that to other multi-strats who have say 20 to 200 different investment teams. They may be making anywhere from 20 to 200 discrete decisions. Maybe not 200, but they are making 40 discrete decisions if, let's say, they operate in 40 different sectors or strategy areas. I have two decisions.

It's much easier to make two decisions than 40. I am also not worried about trying to project what sort of opportunity exists in a particular sector because I am more concerned about what market conditions I am facing. It's the market conditions that become the overriding factor.

As we have seen over the last year-and-a-half, stock price dispersion has started to widen out. What we haven't quite seen was volatility picking up, so there is wider dispersion with low volatility. And so all of a sudden, the hedge funds started making money again. Why, because it became a stock-picking environment.

And that happened a point in time when the world was saying that the only way to go was passive. Well, passive to me is for an up market, a bull market. And coming back to the question of liquidity, people are going to find out what liquidity looks like in passive instruments if we hit a period of stress in the market. It won't be pretty at all.

Nancy Davis: I have a question for Rick. I don't trade stocks, but something that worries me, or which actually excites me because I'm on the opposite side, is the liquidity of borrow.

We do have a "trolling" methodology like you called it. I've never heard that term and I like it. We construct all of our portfolios, including our short portfolio, in the same way. We rely upon our MATLAB proprietary screening tool to help us find assets that provide cheap convexity and optimized risk reward for the capital deployed. We call this tool the Quadratic Structural Alpha Monitor ("QSAM").

QSAM is the foundation of our investment process and it provides the framework that makes our process repeatable and scalable. It allows us to identify inefficiencies in markets, interpret vast amounts of data, and integrate empirical evidence with statistical and econometric estimators to screen for investment opportunities.

One thing I have always believed is that **shorting with options is just a superior way to do it.** There are several reasons – four actually – but one is that when you short with an option, you get time on the borrow. It's a way to term out the borrow.

When you buy a put or you sell a call spread, for instance, you basically are locking in your borrow cost today at the easy borrow for a certain tenure in the future. And you can term out the borrow as far as you want: one year, 18 months, whatever. And that way when the security actually goes down, you can make money off borrow costs going up, because that cost is implied in the option forward price. You make money on the security going down because you are short. You make money because volatility usually goes up in credit and equities. We also love running a long gamma book, and so we absolutely love jumps, any sort of surprise election, trade war rumors, anything that spikes volatility are super happy moments when you are long liquidity and long gamma.

But the thing I am curious about, because we saw it clearly in the crisis, was the effects of heavy vol selling by investors or real economy firms seeking to boost returns in what they think is a low risk way. I think Volkswagen was the best example of this. If you're not familiar with the Volkswagen story, Porsche was selling all these options to the street. They were selling so many options that it was pushing down the implied vol. And this makes everybody delta hedge more and it turns into a snowball rolling down the mountain. The process feeds itself and the market gets very distorted very quickly. Suddenly this supposedly low risk way of goosing returns doesn't look so low risk.

Now, this is not what we do. We are trading vols and asset classes, buying or selling implied and delta hedging with realized. But because of our QSAM tool – our "trolling process" to use this term we're using today – we are watching hundreds of asset classes, thousands of assets, in the options world. And we were shocked when we started to see Volkswagen being the cheapest vol around. It was cheaper than Dollar/Yen vol. That made no sense. So we felt great taking that position.

And so here's the thing with regard to the traditional shorts – they might have been fundamentally right about the direction, but the borrow killed them. They didn't have the time, because it first spiked and then it fell. But with our options, we were able to profit because we made money on the up and on the down later because of the gamma. And we didn't care one bit about how much the borrow cost.

Another example of this playing out was with Home Capital Group, the Canadian company. An investor could have a strong conviction that the stock was going to fall, so they got short. And they would have been completely right about the direction. But as soon as the stock started falling the borrow cost went up about 200% overnight.

Think about the implication of that. It means you need the stock to go to zero in six months just to break even on the cost of the borrow to keep the short positions open.

It's trades like this that give us a disturbing peak behind the curtain. If you think about somebody who runs an equity long/short book, they are essentially borrowing securities from the bank, right? And banks have changed a lot since the crisis. They don't have the capital dedicated to market-making that they used to have. And securities lending is just a pass through cost to the manager, because the borrow cost today could be very different tomorrow. Every single day you have to get a locate.

One of the portfolios we run is an all short portfolio. We're short credit, short equity, long gamma, long vol, and we don't borrow a thing. I think it's just a better way to get short, because you can make money on the vol, you can make money on the borrow, you can make money on the security going down, and you can also have time to wait for these things to happen.

But I would love to hear your thoughts about how the whole long/short industry might potentially be changed because banks just don't have the regulatory capital due to CCAR and all the new regulations. It seems to me that if a bank is having a problem, they are not going to give the balance sheet additional capital. They are just going to charge managers more.

And so I would love to hear your thoughts because I think with all these changes, it really makes a great deal of sense to short the market with options. I think it's even more convex now because of the increase risk of the borrow – you have to get a locate every single day and your borrow rate can go to infinity. There is no cap. It could be 100%; it can go to 200%, 300%, 400%.

Depending on what happens with Dodd-Frank, we may see changes in the US. I think more restrictions are coming in Europe and probably also to Asia. You have definitely seen that in China in the A-shares market where there is no borrow, and your premium is 35%. But as the security goes down, it's a supply and demand imbalance. More people want to short and so the cost of shorting just goes up.

I think shorting with options is just better in all ways, but I would love to hear your thoughts about how to factor in that risk of, *gosh, when we will have a liquidity event?* What if everybody's borrow starts getting really expensive? I think that's what's been happening recently in the markets.

Rick Doucette: What has become increasingly more important since 2008 is the treasury function for any long/short fund, doesn't matter the asset class. The treasury function to me is not just about going to go to Goldman Sachs and pulling one of the guys out of their stock loan area. To me, you want to find people that really understand the concept of what is the best approach to finance a position.

And so I agree with you. When I look at borrows you need to think about how you best structure a short. You also have to recognize that unlike in the early days where everybody had one prime; now it's not uncommon for people to have two at a minimum, and many fund managers have three to five. Every bank's lending business is different. Some Banks, for instance, use the options market to facilitate a lot of their supply because the people running the desk are option and derivatives guys.

In the traditional approach, banks borrow from custodian banks or directly from large institutional investors. Or they may use a combination of the custodian banks/institutional investors as well as their private wealth management business. So you have to know where and how they source their business. You need to look at what you are trying to short. Can you do it more efficiently in the options market? Indeed, sometimes you can execute the borrow at a lower cost. There are instances, particularly when stocks go special when it's a lot cheaper to do it in the options market than going to the banks.

But the one area where I believe I have the biggest problem with shorting is not in equities, because there's enough flexibility in how you want to short – I can go borrow directly from my prime, I could use a swap, or I could go into the options market. I have variety of options available to me. Where I don't have as much variety is in the credit space. The problem in the **credit space** is the haircut requirements demanded by Dodd-Frank. In many instances the required haircuts make the return to the lender unattractive.

So the only way you get capacity in the credit space is through volume. The lender looks at their relationship with you and the total economics you are providing them. They will give you capacity if it's sufficient enough. That's where I worry the most about borrows. I have less concerns on the stock side.

But I do think that you need a person sitting in that seat who understands when he can borrow from Goldman, should he go to the swaps desk and effectively structure it that way, or can he construct it in the options marketplace. Usually if you hire somebody off the street, out of the stock loan area, they know the first option, they know a little bit about the second one, but they know little about the options marketplace.

So correct, Nancy, this issue around shorting is something we need to be cognizant of. And it's not just that,

we also need to be cognizant about *how we margin positions*. Therefore the treasury function I mentioned encompasses both how do you most efficiently structure the short side of your portfolio from a financing standpoint, as well as, how do you efficiently allocate margin on both the long and short sides of the portfolio, because now you have three to five primes instead of one.

Things have gotten more complex. It is not as easy as it used to be. What's our response to that? Well, the response is much like what we needed to do on the regulatory side. Prior to 2008, regulations and

compliance was a part-time job of the CFO, but now I have four people in that position, not to mention the use of outside counsel and a compliance consultant. So, it's like anything, as things get complex, you address it both by getting better understanding of the issue and then finding the right person to slot into that position.

Michael Syn: Many of Rick's and Nancy's observations make so much sense, and in the context especially of developed G7 markets. As emerging market capital formation accelerates in North Asia, with China now the second largest stock market in the world and soon to be the largest by some measures, it's been interesting to see which marketplace norms are upheld and which are discarded, given the very different social context.

The implementation of alpha comes at a premium in an access-restricted EM Asia marketplace. When the market falls, a number of things that you might not expect to happen can happen. The regulator tells the company to suspend stock trading. Some suspensions go on for six months. When your stock is suspended at the same time your fund has just been redeemed, where and how do you mark this stock, how do you provision for tax? This impacts all liquidity pricing assumptions, on top of wrong-way risk.

There is a huge bid-offer inherent in the domestic social purpose of EM Asia capital markets, especially in near-deficit countries like India. They like your international dollars to be gated on their side of the capital wall, which is in fundamental tension between your need for T+2 liquidity.

SGX exists largely to serve this client need. How to provide an offshore marketplace which is jurisdictionally compatible, plus an implementation offering for long and short access to investment factors of an onshore capital market like India and China. How to make sure there is an orderly marketplace priced so there is continuous two-way flow.

This market architecture relies on connectivity between capital marketplaces and on their risk conveyance intermediaries. In the post-Lehman challenge in Emerging Asia, more acute than elsewhere, many of the most sophisticated intermediaries were US and European investment banks. They had the best client and product and risk knowledge and also had balance sheet onshore, while very few of the onshore banks from China, India and Indonesia engaged in treasury business. Today the largest banks in the world are Chinese. They have the balance sheets, but they don't serve this risk conveyance and facilitation role for Asia.

Matthias Knab

Don, in your introduction you mentioned you set out to disrupt seeding. Can you tell us more about that? What are you aiming to do, and how?

Don Rogers: I think that traditionally seeding has been about scale where a good seed investment was valued based on the capacity of the fund almost irrespective of the strategy. As the fund then can manage more assets, which results in a better return for the seeder because a seeder secures a revenue sharing or some economic interest in the business. So the thesis was the bigger that business could be, the higher the seed economics that could be earned on that investment. The end return of the LP was less important.

In a world where alternatives were a very small industry, I think the idea of growing as big as you could probably was a reasonable proposition at the time. But our belief at Stride is that **assets are the enemy of returns**. A very large asset base makes earning returns more difficult.

Sure, there are some brilliant people at firms that have been enormously successful over the last 20, 30 years, but we also talked about cyclically earlier. I think that our own industry of asset management has cycles as well where styles come into vogue and firms can have great success. They then invite competition, people leave their own company and start competitive firms. Other entrants pick off the opportunities, more capital flows in and the opportunities that once existed diminish. However, capital is also flowing away from other areas, so new opportunities emerge at the same time.

Today, finding new teams that can compete with very large, very sophisticated, well-established competitors that dominate a lot of sectors in a very liquid market is very hard. So rather than replicate what has been successful in the past, we try to find new, *unique areas of opportunity around the world*. Sometimes those areas may even be capacity constrained, which is completely backwards for a traditional seeder, right? But the change in our approach is that we don't want to find the absolute biggest capacity manager we can find; actually we love to find managers that have some limited capacity, so the big firms cannot compete against them. Our main aim is sustainably higher returns for LPs, not scale.

One of the things we haven't talked about which I think is critically important is **the position of the investor**, the position of the LP today and what they are wrestling with in terms of all these dynamics we are talking about, in addition to their own needs, whether it's a family, a pension fund, or an endowment.

I believe one of the big sea changes that are going to happen is that in these areas that are more crowded, more liquid, and that more competitive firms are not going to be able to deliver the same returns or demand the same fees as in the past. And therefore investors are going to have to look for other alternatives for higher returns. These opportunities are not yet obvious, and the winners are not yet clear. That is where at Stride we want to hunt for opportunity.

If you talked to me 20 years ago, we were looking to find long/short strategies, which was relatively new, such as a TMT fund that could be long or short technology stocks when a lot of people couldn't, a lot of tech was new and developing and most of the world could only invest long-only, and so being able to short was an incredible advantage. Today, that is an extremely crowded space with lots of talented people competing there.

At Stride, we won't add a lot of value finding another phenomenally talented TMT manager who has to compete with all those other similar managers. When I look at LPs and investors in the world, I think they are trying to figure this out. They see the world in front of them changing, but they haven't yet figured out what to do about it, or change dramatically yet. But we believe that change continues to come. We want to disrupt the traditional seeding model by helping LPs access a new generation of manager, and gain exposure to new opportunities that are going to serve clients well. It is harder than ever to find these opportunities because they are not obvious and flying under the radar. That is how we are looking to add value.

Matthias Knab

Nancy, what has been your experience having gone through the seeding process to get started? Would you do something different looking back?

Nancy Davis: When I started my firm almost five years ago, I had been a trader and portfolio manager my entire career. But I had no experience at all in sales and marketing. With me and my team coming from Goldman, we were used to having really great compliance, infrastructure, middle and back office, and going with a seeding partner was definitely the best thing for us. We didn't know where to go to find investors. I'd never done an investor meeting before.

I was just hoping and praying that we would end up getting one offer, but we actually got multiple seed offers which afforded us choices. We chose a route that gave us infrastructure and also capital, which I think it was the right choice for us at the time.

I think when you are starting your firm – and Spencer, you probably are going through this right now – I think your needs are really different than they are a couple years later when you're into the next chapter of development. In our case, although the seeder was great, it was definitely time for us to move on. Our strategy is scalable. We are long liquidity, long optionality, and we don't borrow any money. We don't have any liquidity issues. When I am meeting with investors who don't understand options, I try to stay away from Greek terminology. Instead, I explain our approach as kind of like a "debit card" strategy. Everything is fully funded in advance. We don't borrow, we don't trade futures, and we don't use any prime brokers' balance sheets. We benefit when funding cost blow out because we don't borrow any money.

By the way, this is why I am rarely invited to cap intro conferences – prime brokers think we are revenue negative and don't help their bottom line.

When you think about cap-intro conferences organized by prime brokers, what do you see? If you look at the geographic and style diversification of managers at cap-intro conferences, I would bet you that 60% of the managers are equity long/short managers out of Asia. And the reason for that is because that's the most egregious borrow and the place where prime brokers generate the most revenue. I mean, we're all capitalists. Even your friendly neighborhood prime broker.

But coming back to the next chapter of our evolution as a firm: what we really want now is a distribution partner. I mentioned earlier that our strategy is easily scalable. So we want to expand and also offer some differentiated long-only products. We'll use the same methodology, use our QSAM model, but focus it slightly differently. One strategy we're looking to spin out, for example, is a **long inflation expectations portfolio using curve options**. There's nothing out there on the market right now, and this is a risk every single investor faces. Most investors are underweight duration, especially in Asia, because most of them are asset-liability managers and their liabilities are becoming much longer. That's why you have Ireland or Mexico issuing wildly oversubscribed one hundred year bonds. These investors are duration-starved.

And so there is really no good way to hedge inflation in a portfolio. I remember Paul Tudor Jones' comment about preferring to hold hot coal versus a treasury bond. I'm not as articulate as he is, so I'm not probably doing it justice. But if you short bonds to hedge inflation, you're short duration. And the problem with that is that most of the trading models are systematic and passive, and when equities sell off, people will buy bonds. And a lot of investors in the vol space have been selling equity vol to buy rate vol, trying to do that arbitrage. But that's never going to work in a risk-off environment, because bonds will be bid up and rates won't go up, so you are going to lose money on both sides.

Going back to our question about seeding, our firm will have its three-year birthday in May. Our needs now are wildly different than what they were when we were getting set up. For us, the next step is distribution. So we are looking for a distribution partner to help us grow the business. We don't have a marketer yet, most of our investors came through the seeding process and grew from there.

Spencer Lampert: I have actually chatted with just a few seeders, but when I made the decision to start my own company, I had two realizations. One was that in this world I have been incredibly blessed. I have worked at a fabulous shop for 30 years and have benefited immensely as a result of it. And so when I made the decision to start a company, I said that I will also finance it over the next two or three years that it may take me to get it up and running. That's a fortunate position to be in.

The second realization I made was that as a result of my prior experience, I was really good at portfolio management and really good at chatting with the investors, but that I had no clue what happened after I hung up the phone or pushed a button to buy or sell a futures contract. Somehow that trade appeared on my position sheets. So, I hired a gentleman named Charlie Gilroy, who has had over 20 years experience in the business, mostly on the credit and operating side and participated in the launch of somewhere in the vicinity of 150 funds. I also hired a senior accountant from a well-known multi-portfolio manager hedge fund to be my Chief Financial Officer, Joe Intagliata.

So, I put into place the structure and some of the people that investors would be requiring of me. I also went out and met accounting firms and fund administrators and law firms, and even though we don't have a commingled fund product yet, we have the structure of it and the side of the business that isn't portfolio management is all established. I use Ernst & Young, HedgeServ and Sidley, and the reason I went with such well-known names was specifically because I have chatted with investors and I respect the job they have to do. Part of their job on the due diligence side is going through a checklist, and I did not want them to be caught up having to ask questions such as who I happen to have chosen for my legal advisor or my accountants, or why, we've never heard of them. I didn't want the discussion to be about that. Global macro has been a difficult sale over the past couple of years, and so I wanted the discussion to be about me and my competitive edge and not about any limitation or question about my set up. And like I said, I have been blessed to be able to address that.

Matthias Knab

Some of you have already mentioned the investor side and their needs, issues and challenges. Does anyone like to add some thoughts or observations?

Rick Doucette: Maybe I could start by looking at the evolution of the hedge fund industry as I think there are interesting parallels to the past. The investment counseling business first started developing in the late '60s, early '70s. These types of changes happened because of economics and it's specifically the economics of the manager that drive these changes. The reason why the independent investment counselor grew back then was because at the time, most of the assets were held by banks and insurance companies. The general policy of the bank and insurance

company was that nobody could make more money than the CEO or president of the bank or insurance company.

So, the natural inclination of the best investors was to leave the bank or insurance company and start their own investment counseling firm where they had no ceiling on their compensation. The barrier to entry at that point in time was negligible, much like the hedge fund industry in the 90s, early 2000 – a Quotron, an assistant and a phone. So anybody that recognized that the economics of an independent investment counselor were much better than at a bank or insurance company left, regardless of their talent.

You saw the same thing in the hedge fund world. The initial shift came from people that were

really smart and came either from banks or investment counselors, because there was no limitation on what they could make. The long-only side of the world had fees somewhere between 10 basis points and 50 basis points, so the allure of a 2% management fee and 20% of the profits was an enormous number.

So, first the most talented people left and started a hedge fund. The early practitioners threw off ridiculous performance numbers because they had little to no competition for all intents and purposes. That fostered a sort of talent drain from banks and the investment counselors into the hedge fund world. Again, regardless of the level of talent of the individual.

Hedge funds also had a different investor base. The early client base of hedge funds were family offices, endowments, and the private banks in Europe for the most part. Insurance companies had some exposure, and that was about it. Pension funds did not want to look at the hedge funds. They thought they were too high risk, less ethical and thus kind of taboo.

So more or less at the time when the number of hedge funds expanded without differentiating marginal talent from real talent, you saw that the funds became more acceptable to the institutional marketplace. We saw the classic institutional response which is: "I'm not going to talk to you unless you have a five-year track record and billion dollars of assets." This of course meant that capital flows went to the largest managers, which only made them bigger, which in turn creates the problem of saturation and crowding that Don had discussed. This is affecting all of us, which is an end result of unbridled expansion.

This problem is not inconsistent with the life cycle of an investment firm. When someone starts a investment firm or hedge fund, the objective is to take risk in order to generate returns sufficient to attract assets. So, the manager will be focused on taking calculated risks to generate returns because he wants assets to flow in. But at some point there is a transitional shift where the management fee becomes more important than the incentive fee. At that time, the manager's focus isn't risk-taking but risk-mitigation.

So, you've got this **vicious cycle** going on in the marketplace right now where this push of assets into hedge funds by institutions and their traditional approach of investing only into the biggest firms causes those firms to continue to get bigger. The bigger these firms get, the more the disincentive to take risk to generate return, and so you see return compression and subsequent fee compression by investors. In my view what we are going through right now is the natural evolution of the marketplace.

In the beginning when barriers to entry were really low, a lot of people were coming in regardless of talent because they were attracted to the economics. And as the business starts to mature the investor base then says "Well, wait a second, I'm paying 2% to you. The only time you ever make money is when the market is up; and you lose money when the market drops. I'm paying you 2% management fee and 20% of the profits. But by the way you get the 20% on the ups and I eat the losses, so how does that work for me?". So, the investor community starts to rationalize the industry by being more subjective in terms of what they are willing to pay in fees to the manager based on what their results are and how they are achieved.

And that's why everybody is talking about fee compression. <u>However I don't hear of fee compression issues with the people that are generating returns</u>. I've actually never seen it, even back in the late '70s and early '80s. If you had returns nobody questioned you on fees. If your returns were marginal, the first thing they did was cut your fees.

But along with that, investors and managers really have to understand the issue of **strategy capacities**. Even back in the '90s, there were managers who had phenomenal returns until their assets got over \$20 billion. When they hit \$20 billion, they underperformed, why? Because the capacity they were managing exceeded the domain they were the expert in. So they started to bring in more teams and people. In each instance they diversified into markets that were new to them and then relied on teams they brought into their firm to oversee their investments in these new areas. These new teams were not as talented risk takers as the founder and the performance of the firms were impacted when those teams misjudged the risks they were taking.

The by-product of running a lot of money forced them out of their area of expertise which in turn increased the risk profile of the portfolio, or they were forced to rely upon delegation to other people who they thought were really good in that market. But, delegation is also a risk. This is why understanding the limitation of capacity for strategies is so important.

I haven't looked at your strategies, Nancy, but my guess is there is some level of liquidity where it becomes difficult to execute the strategy which dictates your capacity constraint.

Nancy Davis: Just quickly, regarding fees, I think 2 and 20 is just something people made up. I think hedge fund fees are way too high in our industry, especially in this return environment.

When I started Quadratic, we branded ourselves as a discretionary macro strategy. I wasn't really sure what else to call the firm. But what I really wanted to do was to build a process that is a better way of constructing portfolios. So today, I think of Quadratic more as an alternative asset manager than a discretionary macro strategy. I think now the new way is about effectively handling **more bespoke mandates.**

We touched on this already. Different investors have different needs and so we need more customized and specialized products or services. This is where I think Quadratic can really contribute as an alternative asset manager. We give exposure to multiple asset classes, convexity and different things. We're not stocks or bonds, but really a different method of constructing portfolios that give investors exactly the exposures they want. I think that's the way of the future.

I think the future is really about bespoke services, asking the client about their needs or problems they're having. For instance, a client might say, "I am underweight duration but I'm worried about adding more because inflation is peaking up." That's a

concern I think a lot of investors have. We can give them a product that provides optionality on inflation that

doesn't get them short duration.

Or an investor might say, "Well, I'm really underweight equities because I'm scared that asset prices are too high." We can offer them a principal protective structure that is long equity exposure with limited downside and asymmetry if equities go up.

Tailored products and solutions-based portfolios are where our industry needs to go. Not pitching a predefined product. We need to really be a partner with our investors and ask what they need. I don't think most pensions, endowments and foundations are just looking for returns. I think they are also looking for diversification of their portfolio and that's why I really want to expand my firm beyond the discretionary macro label to really be an alternative solution provider.

Don Rogers: I also believe this idea or definition of what a hedge fund is not helpful. The term hedge fund covers an enormous breadth of strategies. But the negativity around a few large segments of hedge funds are carrying over to the entire category. The pressure from this on the whole industry can be felt by all of us.

We happen to love that because it's also blurring the view on all opportunities that might be considered a hedge fund. For us, we can find a situation that offers a long tail-wind of outperformance, but because it is considered a hedge fund, the value of the business is impaired today. As buyers of asset management firms, we think this sets up an ideal environment for us.

I think trying to find a new name or category for yourself is an interesting idea also because I believe that the hedge fund name is not useful or even accurate, it doesn't even mean anything really.

What it really means is a firm that charges an incentive fee. I happen to be a big believer that charging an incentive fee for performance, whatever it is, is still super-innovative and motivating.

When all you are paying your managers is the management fee, it becomes an asset gathering game. We are all motivated by financial incentives, and in that model, the only way to get paid more is to grow assets.

The brilliance of the incentive fee is that a manager is not totally incentivized to grow assets but they get paid for performance. Some hedge funds that have grown very big are now more motivated by their management fees so there are still issues with it. But with the incentive fee a manager can determine it is best to stop growing and focus on generating a profit for clients because you participate in that profit. That's a very effective idea, and I think doing away with that is a terrible idea, because when I think about putting my own money to work, I want to invest with people I am partners with, so when they succeed I succeed, and we succeed together. That's powerful. But if I'm just giving capital to the folks who are just trying to grow their asset base to earn a higher management fee, I think our incentives are misaligned.

But I also believe that certain funds, as they get bigger and take in more capital, they may not deserve the same fees anymore because they have put themselves into a different game, the asset gathering game. And I think we are going through this kind of generational industry or marketplace shift as some of these firms that have grown super-big and passed the capacity of where they can continue doing what they did in the past, they may not deserve the same fees anymore, which is a hard thing to come to grips with, but that doesn't mean performance fees are bad and it doesn't mean hedge funds are bad. But it means investors need to find the right situations where they can earn a return they want and pay the right fee for it, and if that combination of performance and fees aren't right don't stay invested. If it's sustainable and can continue to be a benefit to you, it's worthwhile.

I feel like this has all gotten lost in the current discussion, which is unfortunate. The whole hedge fund industry has a negative stigma today and the performance fee has gotten associated with that, but I think that's misplaced. We see it differently, and it does set up great situations where we want to be partners and owners in new, emerging firms who can deliver.

A few portfolio managers have created enormous wealth for their themselves and their clients, because they were visionaries who were early to an incredible investment opportunity, but that opportunity is changing, what worked before and allowed these firms to charge such high fees is changing. They may be just as brilliant and visionary today, but it is significantly harder for them to repeat the returns they produced in the past. This cycle of construction and destruction has happened over and over and over again in our industry. It may cause investors to write-off the whole hedge fund category but I think there is more going on here, which also sets up lots of new opportunity. I see new emerging opportunities where high returns can be generated that will satisfy investors need for returns and their willingness to pay fees for the right alignment with their managers. We believe these opportunities are more likely to be found in boutiques where teams have a sustainable advantage that is hard to replicate.

Rick Doucette:

Allow me to clarify that didn't mean 2 and 20 is kind of the standard. There are established firms with 2 and 20 fees that have generated and continued to generate performance and haven't had issues with these fees. As a new firm however, I think it's almost impossible to get a 2 and 20 without there being some kind of a recognition by the investor that it is a partnership that when the investor makes money, the firm will make money and vice versa.

Spencer Lampert: Last week on Bloomberg was the CIO of either CalPERS or CalSTRS, I don't remember which. The last question he was asked was "the hedge fund question" and he looked at the reporter and said, "You know, we don't actually think of it is a hedge fund industry – and he knew the statistics, I don't know the statistics – but trillions of dollars and thousands of funds, and then to call that by one name doesn't do anybody any good." And he went on to say they prefer to look at hedge funds as a group of strategies that they get to select from, and some he finds favorable to his portfolio construction and some not.

I agree with Don's notion that it's all too easy to call all of that the "hedge fund industry", and indeed it has gone a long way from just a pure hedging vehicle over the past 30 years that I have been fortunate to be part of. I also 100% agree with Don that an incentive fee is what's required for performance. You have to be paid to try and outperform.

> I'm also 100% in agreement with the understanding that investors are happier when their interest and yours as the fund manager's interests are aligned. Actually, none of the investors I've met with has not wanted me to be incentivized to make money.

> It then just becomes a discussion of, "Well, we want you to keep the lights on and we don't want that to be on your head as you're trying to make money, but at the same time..." And I say, "I get it. I want to perform more than you guys want me to perform." There isn't a magical number. It's just that 2 and 20 became the banner for the industry, but Don is right, part of that discussion or reasoning got lost.

Don Rogers:

The history of the 20 actually goes back to Roman times. I forgot all the details, but it was some compensation that was given to a business partner in some sort of transaction. It's interesting that there's a kind of older tradition around it that had a meaning already 2000 years or more ago.

Spencer Lampert: Rick's account on the evolution of the investor base is accurate as well. It's interesting for me that the structure of the investment vehicles have come full circle. The investor-base when I began in the '80s was largely European private banks and European family offices; the US family office was essentially non-existent. As Rick said, there were endowments, and then over time that has expanded to insurance and pensions, but from my side of the table what I found interesting was the growth and evolution of the US family offices. Whether it was the wealth generation of the 80s to the 2000s that created the US family offices that in my opinion may have started with a single individual who had made a lot of money, did private equity investments in their field of knowledge, and then over time that developed into, "Oh yeah, maybe we should also diversify!", and

And in terms of the structure of the investment vehicles, when I began, managed accounts were a big deal. That was how we all began trading. Tudor launched the BVI fund in late 1986 and I joined in April of 1987, but by and large, the industry had a lot of managed accounts and they seemed to fall by the wayside until 2008, 2009 and Madoff, and now they are really a quite active part again of the investment

structures now.

Matthias Knab

that's how the sector developed and took on broader mandates.

Nancy talked a bit about the vision that she has for her business, and Spencer, I want to give you also the opportunity to share yours and what you are offering investors.

Spencer Lampert:

Well, having just on boarded our first account at the last week of January, clearly the near term goals are raising assets, and to do that I have to continue to outperform the industry.

Matthias Knab

Are you trading right now?

Spencer Lampert: I am actively trading investor assets, yes. I envision that there will be a string of managed accounts. I have read all the statistics and recognize that I won't launch a fund until I can soft circle \$150-200 million. I have a group of names who have already indicated willingness and restriction that they must do a commingled fund. So we are getting to that point.

But the near term outlook would be to raise assets. At some point, I like Nancy's idea of bespoke asset management capabilities, and I keep that in mind for somewhere down the road as a possibility.

Matthias Knab

We spoke about how in the mid-2000s the more marginal talent came to this industry, and I have a question for Don and Rick. What type of talent do you see launching right now; what's the caliber or level of quality, and where are they coming from?

Rick Doucette: I should qualify because telling people they are a marginal talent probably isn't fair. The talent was different – if you go back into the 80s and 90s, the talent and the focus was on being hedged. It was really in 2000 when Reg FD happened that the value of research on the street diminished and you were forced to push more of the research in-house. With research now pushed in-house, firms started hiring people in that were more comfortable taking

directional bets in the marketplace. So the industry shifted away from real true alpha generation into sort of a hybrid. The hybrid was hedged with a directional bias, which introduced more of a beta connotation.

It's not that all those hedge fund managers were not talented – I am sure there were some that probably weren't – so there were a lot of talented people, but at the same time the focus of the industry changed away from looking for pure alpha generation by investing in idiosyncratic opportunities to generating returns from a combination of idiosyncratic risk and market direction.

When I look at talent, I think that there's an interesting phenomenon going at the moment that I haven't seen before. There is a tremendous availability of talent in the form of seasoned professionals. For example, in my industry there are people that have been running long/short books successfully for 15-20 years.

Some are what I call "**stranded asset managers**" – somebody that had a really good track record, spun out to do his own thing, but can't raise assets and now are at point where it's kind of, "Do I run \$100 million or \$200 million or do I go somewhere I can find a home and get scale?"

On the other side, there are some seasoned people at larger shops who, when the corporate modus operandi shifts from risk taking to risk mitigation, have a difficult time making competitive returns. That is a difficult thing for somebody who is creative, and I think successful investment people are very creative. But when you start to constrain creativity, you create frustration. So this industry is an area with great creativity and some of the most frustrated people are those with 15-20 years of experience, who in some cases are now being forced to operate under parameters that they find constraining. I think this is a really interesting situation.

The other thing to mention is that there are a lot of different ways to generate alpha. It's not just whether you are equity long/short or relative value credit or interest rate arbitrage or macro or looking in other alternative markets, like the derivatives space. There are a lot of different ways to make money. And therefore, I think all of us are interested in finding and sourcing different ways to create alpha. But right now I believe there is also a shift within the industry back to people whose talents have shown a propensity to be able to consistently generate alpha versus the hybrid or predominantly beta driven products.

To come back to the talent question in a different way – everybody in this industry is talented, but we have to distinguish between me-too talent and differentiated talent. There has always been a lot of me-too talent in this industry. It's been very hard to find differentiated talent. And when I say I see more talent availability, it's that I see more differentiated talent available than I have seen in the past.

Don Rogers: I agree that first of all we are in a fortunate position where we see so many talented people. We have hundreds and hundreds of people come through our offices every year pitching new ideas and sharing what they are up to. The world is full of really bright, talented people. But, we just happen to believe that this is not enough. It's a necessary requirement for success in investing, but again, if you are jumping into the most competitive pool, you might be the smartest person on earth, but it's going to be very hard to outcompete in an extremely competitive marketplace. So not just the talent, but actually where folks are directing their style and the way they invest are important factors to us.

I also think that innovation in our industry has been stifled by a confluence of factors. The big hedge funds have soaked up a lot of capital and reached a size where you can see managers spinning out who operate a lot like them. So a lot of capital has been going into these areas. The fund of funds have been kind of pushed out, it has become more difficult for fund of funds

with the consolidation in the industry. The funds of funds have historically been a key supplier of capital to emerging firms in the past, but this source of capital has really diminished dramatically.

My impression is that many investors are also frustrated with the product offerings that are available to them today. The capital available to start a firm has largely diminished, yet at the same time investors want innovation and new ideas, but it has become harder for a new firm to get off the ground and more difficult to gain critical mass than in the past. But at Stride we believe the new generation of managers deserve meaningful capital and effective assistance, a partnership to help them build their business, and that is what we are doing.

Matthias Knab

I wonder, how is the capital raising going for Stride itself as a seeder? Can you easily the capital that you need for your work and to allocate to new firms?

Don Rogers:

We have been very fortunate in our ability to raise capital to do that, but honestly others haven't as much. And so we really like the competitive landscape. The general negativity about the broader hedge fund world casts a cloud over anything with a hedge fund or limited partnership structure.

However, we also believe the market needs innovation. It needs new talent, new solutions, new ideas and there isn't a lot of capital providing that. At the same time, as we mentioned, the other source of capital from fund of funds has really dried up and so there isn't a lot of competing seed capital. We feel this is an ideal environment for what we do.

Michael Syn: Maybe I can share two observations from the financial technology arena. SGX has an initiative where we meet and host startups. They are all thinking how to scale up innovation, and there seem to be two separating layers which tackle that.

One is very scale-based. In this approach to rationalize an investment operation the main focus is on the operating aspect, where you really want huge economies of scale, bargaining power, and low marginal costs.

And the second approach is someone delivering intellectual property. So those two are kind of linearly separable things.

These platforms already exist in China and the US today – scalable investment operations and advisory platforms that literally crowdmanage as well as crowdfund assets. But because these are all virtualized, the platform can bundle assets and managers up as near-equity.

You can let market-based mechanisms determine not only the price of capacity in your strategy, and discover how much money someone deserves to manage and at what price, and also set a liquidity price depending how quickly I need to swing out of my allocation.

This attacks another problem, which is *if the manager has an investment process which is sustainable, then maybe I shouldn't be thinking of your and my incentives in terms of annual fees, with all the pathologies that you have about the quarterly marks or annual marks, the NAVs. What I really want to think about is the net present value of the manager's process applied over five to seven years, because that's how the value creation usually works.* It says, if I think over the next five years you are going to sustain these returns, I will NPV (net present value) that, and that's your series B price.

So here we have these two trends of using a private equity-type structure to align incentives through carried interest and chargeable expenses, together with the democratizing idea of an Internet-based platform where I rock up to my screen and swipe right if I want to be long vol, say, then my portfolio auto-subscribes to someone's long-vol portfolio, a pure piece of intellectual property in terms of portfolio construction. But I also have outsourced operating efficiencies because the platforms

implements and executes my portfolio for all subscribed assets, whether commingled or segregated. These platforms will improve and bring market discipline to this intertemporal gap between liquidity preference and investment process horizon.

If Alibaba or Amazon decided they wanted to do this they could easily stand up a cloud infrastructure with say 100 liquid risk factors, and off we go. The fact that they haven't gone there yet is because no tech company yet wants to touch the regulated financial or banking space.

But if and when they decide to cross that bridge, then this next-generation market platform brings the best investment hands and brightest minds to the AUM buffet with an ability to apply a sustained investment horizon and carried interest over say 5 years.

Spencer Lampert:

On Rick's point about coming out of a well-established firm with a long track record, imagine how exciting it is for me to walk into an investor meeting and look them in the eye and say, "I am an emerging manager with 30 years experience." I love it. It's really a great opening line, and I have everything required to back that up.

Don, you mentioned a connection to the Dell Family Office. I will bet you, not many guys walk through their doors saying they have 30 years experience in the particular industry and I am here to help you manage your money.

Matthias Knab

Michael, before we close the discussion, is there anything in Asia that you see is exciting and you haven't had the opportunity to share?

Michael Syn: Capital formation is growing apace in Emerging Markets Asia. Price formation is now very distinct in the Asian timezone. **The market architecture of pricing is very different from even five years ago.**

You can now see that the price formation of equities, FX, commodities, crypto is booting up in a morning time zone which used to be dark, given the huge and connected numbers of buyers, sellers and informed wholesale traders.

This will be interesting, because many markets which were previously thought to be 24 hour global macro markets will develop very distinct morning timezone characteristics – Brent or soon Shanghai crude. Gold. Steel. Soybeans. And certainly the stock markets in China.

Last year's emerging markets outperformance was driven by tech! This isn't Granddad's emerging market! Because in North Asia, they make the iPhones, they make the semiconductors, the bitcoin mining rigs, and typically the news flow that comes out of the US from the FAANGS leads to Korea and Taiwan moving overnight.

So for SGX as the offshore exchange for Asia access derivatives, and for me travelling to visit clients here in Connecticut and in New York, Asia is a macro market story of many parts that SGX has to serve as a risk management platform. For the institutional investment manager who has only got a day shift, I think life is going to get very interesting.

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Managers like Julian Robertson, Izzy Englander, Jim Chanos, Jeffrey Ubben, Elena Ambrosiadou, Anthony Scaramucci, and many others have done Opalesque videos, as well as institutions like Morgan Stanley, State Street Global Advisors, M&G Investments.

Broad distribution

You can either produce a private video with us, which will only be hosted on the non-public part of your website, or we can offer you the broadest possible multi-channel distribution on Opalesque.TV and our partners like Reuters and other leading platforms. Contact us to discuss your custom distribution package.

Managers have **quadrupled assets** thanks to our video (\$700m to \$2.4bn in 1 year) and also received a book contract or **invitation to speak at the World Economic Forum or at TED** through our video:

- View count: Over 1.3 million views (hundreds of thousands of people)
- Thousands of investors will view your presentations
- Longterm effect: Views do not drop significantly over time
- Without investing a single additional minute of your time time required to record a video is approximately 90 minutes.

Costs

For a 10 minute video the all-inclusive package price is US\$5000 which includes: travel (Europe and NY tristate), full production at your office, multiple edits (cuts), provision of the final video file, and a global, multi channel distribution package. A 15 minute video is \$7,000, so \$1,000 will be billed for each additional 2.5 minute above 10 minutes. The client determines the final length of the video.

Links

Opalesque.TV video which got 104 views over 2016 Christmas: http://www.opalesque.tv/hedge-fund-videos/patrick-stutz/

Opalesque.TV videos sorted by number of views: http://www.opalesque.tv/most-viewed-hedge-fund-videos/

Opalesque.TV videos sorted by number of social media shares: http://www.opalesque.tv/most-shared-hedge-fund-videos/

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