

[Extract from overall summary of the ISSA Regional Meeting Europe 2007]

### **3. Alternative Investments**

#### **Introduction to the topic – "Operational Efficiency Enhances Alpha"** **Markus Ruetimann, Schroders**

Alpha: a quantitative technique which measures a stock's or fund's outperformance – risk adjusted - of its benchmark. Alpha is a common measure of assessing a fund manager's performance in excess of a benchmark index or a risk-free investment.

Operational efficiency is at the heart of creating value (Alpha) for the end investors and for all firms filling a role along the intermediary chain.

The hedge fund industry is roughly 60 years old. It experienced massive growth rates in the past few years. Currently, some 9,000 hedge funds are active world-wide. Around 65% of institutional investors place an estimated 5% of their assets in hedge funds. Hedge funds use a variety of investment strategies, some of which use leverage and derivatives to accentuate the impact of market moves. Many seek to reduce market risk specifically by short selling investment instruments, and by using swaps and derivatives.

Those strategies have substantially increased the operational challenges custodians are faced with. They place huge demands on the availability and accuracy of relevant data, on operational expertise across a broad instrument range, and on technology to support the lifecycle of a transaction which can span many years.

To illustrate the operational challenge, Markus Ruetimann briefly explained the main features of a number of exotic and complex yet frequently used options. Two examples:

- Chooser options (a "compound" option that has an underlying instrument which is itself an option, a strike price, a "chooser" date and an expiration date. At the chooser date, the buyer has the right to choose whether the underlying option is a call or a put option for its remaining lifetime.
- Sports derivatives: after every game, the value of the stock of a particular sports team (if it is a traded company) rises or falls depending on the result of the game. Investors trade these stocks and a number of derivatives using sports events as "underlyings".

Conclusion:

To cope with ever increasing volumes and instrument innovation, the asset servicing industry must find credible ways to **reduce** risks, costs, operational complexity, manual interventions, a multitude of different system applications to process an instrument end-to-end, resource requirements, and time to market to come up with automated solutions. At the same time, it must **increase** processing capacity and efficiency through scalable technology, the definition and promotion of industry standards, and making much more use of shared data services.

The next three speakers presented in greater detail some particular challenges from their perspective.

**Broker's view (Bill Thum, Morgan Stanley)**

The trend highlighted in the 2006 ISSA Symposium that the global capital market landscape is transforming from a vertically oriented, product and market based silo structure into a horizontally oriented structure along the layers transaction processing / risk management / data management, is quickly becoming reality.

What are the dealers doing to digest the enormously rising trade volumes and product innovation in the OTC derivative field?

***New client on-boarding***

The due diligence process applied by dealers in onboarding new clients for OTC trades becomes ever more important and more complex. Laws, rules and regulations and best practice standards require ever more assessments to be conducted to ensure that clients are properly identified, contracts are enforceable and minimum capital and risk containment obligations towards regulators are satisfied. Amongst others, the framework includes:

- KYC rules (Know Your Customer)
- Anti-Money Laundering rules
- CSE rules (Consolidated Supervised Entity)
- Basel II
- US GAAP (United States Generally Accepted Accounting Principles)
- Legal domicile and tax status
- Risk profile, credit assessment and applicable credit terms
- Capacity and authorization of the client to deal as intended

Client documentation and control is a crucial function. Morgan Stanley uses a large database to assess the enforceability of contracts entered into with counterparties.

***Trade execution, trade life cycle, margin and risk management***

The goal is to track all activity of a client on a single, consistent operational "map". Each transaction should be captured, managed and monitored from trade initiation through to final close-out. Such map should identify each point where risks can arise, the type of risk and the options to mitigate or eliminate it. OTC derivative contracts can remain open for up to thirty years. Such transactions involve a broad range of risk types to be monitored beyond the obvious counterparty risk.

With regard to margin management, a dynamic and holistic approach across all services and asset classes is required. Prime brokerage and similarly sophisticated clients demand it as their business strategies and depend on it, and service providers are no longer able to run their own business effectively and prudently without developing that capacity.

***Documentation***

Proper documentation of all transactions is a must. Morgan Stanley drives a number of inhouse initiatives to make the documentation process more robust and more efficient. Master confirmations and industry standards, and electronic means such as electronic trade confirmations, web-based confirmations and central databases play a key role.

**Custodian's view (Jon Lloyd, JP Morgan)****Assumptions versus reality in the OTC derivatives world**

1. *"Processing derivatives is just like processing bonds or equities, and my custodian will take care of all my needs"*

For conventional assets the value chain of Fund Manager - Broker-Dealer - Global Custodian - Fund Administrator is very well established. It incorporates key controls and has proven to be scalable. A "prime record" is created at trade capture which is passed on for further processing. The same cannot be said of the alternative investments space, where processing is based on spreadsheets without a prime record as the source reference. The processes are not robust, not scaleable, risky and error prone.

The cost of managing OTC derivatives is estimated to be 50 times that of conventional assets.

The terms of OTC contracts are spelled out in so called Long Form Confirmations ("= the full Legalese"). In practice, no fund administrator has the legal resources to fully analyze the long contracts in each and every case. The industry relies on a short form, which entails risk.

2. *"There is one correct value for a specific OTC derivative"*

There is no absolute truth in OTC valuation. There is currently an obsession about exact values, but there are only approximations. The industry needs consistent pricing methodologies, not absolute precision. We need a good compromise between the full truth, and what makes economic sense in order to achieve a sustainable business model.

A great deal of debate in the industry is the regulatory position on the use of independent valuations versus counterparty prices or fund manager prices. This ties into the issue of operational efficiency as it is a key driver of the value chain. This issue needs to be addressed urgently.

3. *"My Fund Accountant will source independent valuations for my OTC derivatives"*

Price verification is a major challenge. Prices for conventional instruments can easily be compared against two or three alternative sources. In the field of alternative instruments there is no such consistency of pricing. Multiple fund administrators will come up with very different prices for the same instrument, depending on the methodology and source data used. It can take several months' time following a deal, until the fund administrator has an agreed-on and robust pricing methodology for a complex product. While there is a clear trend in the industry toward independent pricing, a lot of pricing data are still taken from the counterparty. From a client's point of view this not an acceptable situation.

4. *"I don't need to worry about interfacing to derivative industry utilities"*

Today's alternative investments landscape shows the typical characteristics of an emerging industry. Central infrastructures, industry standards, automation and industry-strength processes are largely absent. Processing costs are high. Workflows do not fit into the systems of a global custodian. Obtaining quality data and getting them into the custodian's system to enable smooth processing and accurate valuation is difficult.

**Solutions**

Consultation exercises are underway to help improve the state of the industry. For instance, IOSCO recently issued principles for the valuation of Hedge Fund portfolios (see appendix to slides).

Market infrastructures have started to provide solutions: for instance Swapswire and DTCC's Deriv/SERV.

For valuations, the focus should be on consistency versus the quest for the absolute truth. Valuation methodologies should be:

- practical
- scalable
- able to mitigate the key risks
- accepted to represent industry standards or at least emerging "best practice"
- clear about what a price actually represents.

The market buy side and the global custodians/fund administrators are beginning to discover now what the sell side has already known for 15 years. The awareness of the full extent of the challenges has only now reached the backoffice and the regulators!

### **Fund Manager's view (Markus Ruetimann, Schroders)**

Market trends since mid-2006 show a rapid growth in the use credit default swaps, solid growth in interest rate products, lower growth in foreign exchange derivatives, and a decline in "simple" equity and commodity derivatives. These trends are expected to continue. New and ever more sophisticated investment strategies, such as LDI (Liability Driven Investments) or the "130/30" pattern (put 100% of a given investment amount into an index; sell short an equivalent of 30% of the invested amount in stocks expected to perform worse than the index; use the sales proceeds to buy stocks expected to beat the index) pose great challenges to the processing and custody side of the business. They stretch existing support systems and staff know-how to the limit, and often beyond:

- With every OTC contract being tailor-made, it is very difficult to standardize the various data components.
- Obtaining fair and independent valuations of OTC positions is critical to both investors and market regulators (the custodian view focuses on this issue).
- Collateral management and ensuring timely mark-to-market requires highly skilled staffs who understand the processes, legal expertise, and extensive technology support.
- Fund managers' accounting systems typically do not support today's complex dealing strategies, data flows and investment instruments. Many systems in place today were installed around twenty years ago.
- Global Custodians are all struggling to deliver scalable support solutions for derivatives without creating yet another IT-platform or operating environment.

To illustrate the dimensions: Schroders currently has some 95,000 open positions in Exchange Traded Derivatives (ETD) and some 1,200 open positions in OTC derivative contracts. OTC transactions at Schroders rose 120% between December 2006 and May 2007.

From a fund manager's perspective, there are no efficient, tested and proven operating models. Firms are all trying to leverage existing systems and processes while avoiding to create dedicated processing environments "just" for derivatives.

There are outsourcing opportunities with respect to valuations and collateral management, but this fragments the process, hindering operational efficiency if not making it impossible.

There is an ongoing war for talent and substantial resources are spent in each firm to run internal training and education courses on derivatives, to raise the awareness and technical understanding across fund management, operations, sales and marketing.

Schroders intend to centralize all aspects of derivatives post trade processing in one unit while leveraging existing order and transaction life cycle management systems. An internal assessment concluded that there is no appropriately integrated technology solution available in the market that could sufficiently cover the entire lifecycle of a derivatives transaction from trade capture to collateral management and close-out. There are still too few industry utilities that can provide solutions to fund managers, brokers, and/or custodians. DTCC is a notable exception with their confirmation service for credit derivatives, Deriv/SERV.

Taking an industry-wide perspective, the key challenges and optimal solutions look as follows:

CHALLENGE	PRIORITY	OPTIMAL SOLUTION
Price capture	Ease of access	Electronic use of broker's pricing model
Trade capture	Low cost	Integral to fund manager's order management system
Compliance	Timeliness	Integral to fund manager's order management system
Confirmations	Scalability, low cost	Electronic interfaces, use of industry standards
Accounting	Integration, low cost	Integral to accounting platform, else outsource
Valuation	Risk reduction	Independent valuation agent, outsource, use of standards
Payment	Scalability, low cost	Integral to accounting platform, else outsource
Collateral mgmt	Risk reduction	Integrated system, incl. workflow tools and reconciliation

**Conclusions:**

- The industry must find a way of promoting standards in the fields of legal documentation, collateral management, valuations, and data management.
- Industry utilities such as ICSDs, CSDs and global custodians are encouraged to develop outsourcing solutions which span the entire lifecycle of derivatives, from trade capture to close-out.
- The war for talent to attract skilled operations and IT staff will heat up.
- Above all, the industry must find ways to reduce operational risk in the derivatives arena.

**Panel and audience discussion (moderated by Jimmy Gambill, Franklin Templeton)**

Some select questions and discussion points:

***Where are the low hanging fruits in the next few years?***

Suggestions:

- Improvements to the client onboarding process. Dealers must be sure they know exactly who their counterparty is.
- Improvements to documentation, in consideration that the typical OTC transaction lifecycle spans several years.
- Improvements to the pricing of OTC instruments. Today's Net Asset Values are not always reliable. The product originators, however, do not necessarily have an interest in making their pricing mechanisms transparent! From a dealer perspective, prices fall into three buckets:
  - Objective prices – taken from neutral data vendors' screens
  - Subjective prices – taken from the counterparty or based on own calculations in a market which is deep and liquid. In this situation, valuation does not pose much of a problem
  - Subjective prices – taken from a counterparty in an illiquid or even non-existing market. This is the true problem zone. Dealers generally are not willing to disclose their pricing methodology to a third party.

Investors increasingly see it as a problem that there are no reliable prices in the market for certain instruments. There is a perception that spreads tend to widen as soon as an instrument is bought... In some markets, the regulators are now beginning to look into this phenomenon.

Relevant industry associations should do more to improve the stability and reliability of pricing. The industry needs guidance in this area, and models giving end-investors the assurance that the pricing of their investments is fair and reliable.

- Improvements to data flows: All stakeholders need better accuracy of the relevant data, and quicker and easier access to them.

DTCC's Deriv/SERV and Trade Information Warehouse already provide partial solutions. 900 market participants are using it, including the top 25 broker-dealers. These offerings are different from a standard equity CSD, yet they are a valuable contribution towards a common industry infrastructure (see slides supplied after the conference).

***What are the long term implications on the industry if complexity keeps rising at the present rates? The true cost of processing complex products does not seem to be reflected adequately in the pricing of those products.***

MiFID may increase the unbundling of complex products and bring about more price transparency in Europe. The industry however needs a greater awareness of the processing costs, and of the fact that processing is a function that does need to be paid.

Price and cost transparency is a major issue. The pressure to explain "every buck earned, lost or not earned" is rising fast. The industry will face further drives to reduce operating costs. The trend towards higher margin products may slow down, as a consequence of the growing awareness of the operational complexity and the associated handling cost.

***There has been much discussion about the ongoing transformation of the industry from a vertical to a horizontal orientation. What is the tipping point for the industry to take a significant leap forward? Does it require a crisis?***

A crisis such as the default of a public sector pension fund, or a major broker-dealer, could indeed trigger a quantum leap. However, nobody wants that to happen. The industry needs ongoing discussion involving all stakeholders, and it needs discipline. With today's meeting, ISSA has provided a discussion platform. ISSA could contribute further by drafting a roadmap for the next two years, identifying the low hanging fruits more precisely and making suggestions on how to harvest them.

\*\*\*