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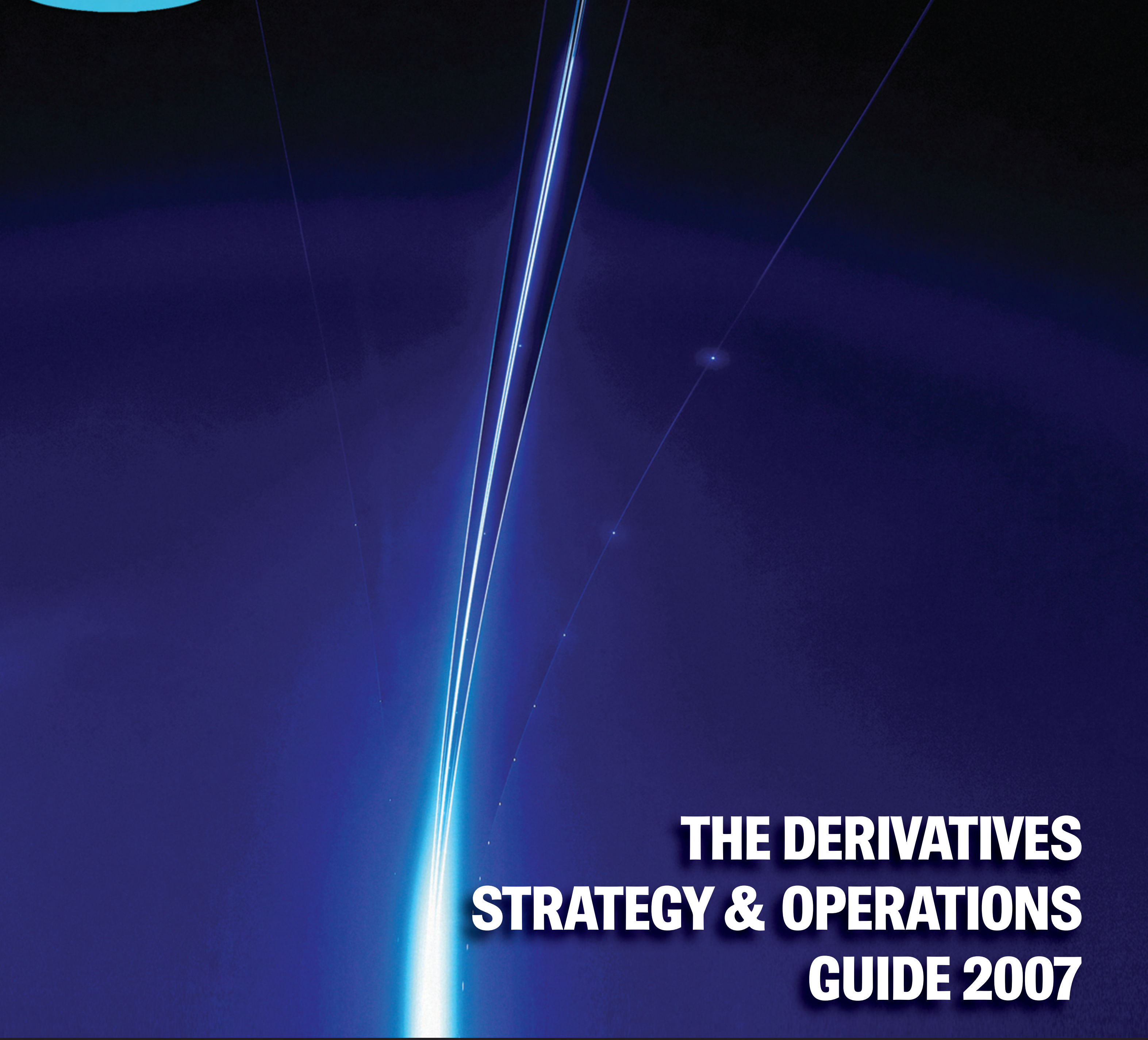


THE DERIVATIVES STRATEGY & OPERATIONS GUIDE 2007

Survey: Derivatives outsourcing set to take off

The Global Investor/Morse Survey indicates a growing number of investment managers who use derivatives turning to asset servicers in order to counter rising operations risk, says *Revel Wood* of Northern Trust

While investment managers are stepping up their use of derivatives in their drive to create competitive returns, the risk of managing operations is constraining growth. Processing trades is fraught with difficulty, manually intensive, requires expensive systems and requires specialist expertise which is in short supply.

The current paper-intensive environment resulting from lack of standardisation in business-to-business communication creates considerable operational risk. For example, about one in every five over-the-counter (OTC) equity derivative trades is subject to some sort of processing or trade capture error, according to the International Swaps and Derivatives Association (ISDA).

Investment managers are aware of this obstacle, and more asset managers plan to substantially enhance the role that asset servicers play in their businesses. When faced with the choice of either building the necessary back office capabilities in-house, or outsourcing to specialist third parties, the vast majority of respondents to the August 2007 Global Investor/Morse Survey state they are planning some form of outsourcing.

"To a small extent firms such as hedge funds have already outsourced, as they set up with no internal architecture and outsourced straight away to prime brokers," explains Revel Wood, product manager for derivatives processing at Northern Trust.

"Clearly a large number of traditional managers are now considering this due to the rise in volume and complexity of derivatives as they look for alpha and absolute return. They know that substantial investment will be required to build up their systems, resources and processes."

Of the 62 respondents to the survey, some 90% were traditional investment managers, with the remainder hedge fund managers. The majority (more than 60%) of respondents currently process derivatives in-house, but are having difficulties with confirmation errors and valuation of complex products. As their derivatives volumes increase, more than 80% of respondents plan to either partially or fully outsource derivatives processing.

Inevitably, this will reinforce the trend for investment management industry participants to focus more on where they can add value – creating investment alpha. So, investment managers will concentrate more on nurturing successful investment strategies, while taking advantage of the scale of asset servicers for back office and related services.

This scale allows asset servicers to make the necessary investment in systems for processing trades in a market characterised by the non-standard nature of both products and associated documentation.

"Across the asset servicing industry there will be significant change, both in terms of the services offered as traditional custodian and prime broker industries merge and their client profiles change," notes Wood. "In short, I believe the scope of outsourcing services will continue to expand up the value chain and will also evolve into more commoditised component solutions."

Tipping point

As traditional investment managers continue to increase their derivatives use partly to facilitate new absolute return investment strategies, the added volume and complexity reaches a tipping point where manual solutions are inadequate. They have to invest in resources and systems or outsource.

Data from ISDA shows that explosive derivatives growth continued into 2006. The notional value for credit derivatives grew by 102% in the year, reaching $34.5 trillion at year-end. There were also substantial growth rates in other derivatives types, such as equity and interest rate. Clearly, these figures only illustrate the broad growth trends, but it is evident that investment manager activity is growing rapidly within this asset class.

Higher investment manager use is a consequence of both the move to absolute return-type investment strategies, and the recent transformation in pension funds' approach to asset-liability management. Traditional investment management houses are increasingly adopting styles such as long-short equity, and pension funds are beginning to use swap contracts to match future investment returns and liabilities.

Regulation is encouraging derivatives use. While the UCITS III legislation, which allows EU retail funds to deploy basic long-short strategies, was introduced as long ago as 2003, it is only recently that investment managers have been taking advantage of the flexibility offered.

Additionally, company legislation in countries such as the UK and the Netherlands is pushing pension funds towards using derivatives for asset-liability matching. As time goes by, trustees are becoming more comfortable with such cautious use of derivatives.

Innovation

Beyond the growing volume of derivatives activities, the ongoing innovation in OTC trading presents further difficulties. As fast as some products become standardised, enabling more automated processing, more and more exotic products are emerging. The bespoke nature of these products makes automated back office processing extremely difficult.

For investment managers making the strategic decision of whether to outsource or build derivatives processing in-house, the main issues are expertise, system costs and speed to market. Experienced derivatives processing staff are in short supply and, consequently, expensive to hire.

According to a 2006 report by the Aite Group, a research and advisory firm specialising in financial services, annual turnover for sought-after operations staff is 30-40%. Finally, many of the cross-asset class systems come with hefty sell-side price tags, and the integration costs are far from insignificant. This is compounded by less measurable costs like opportunity cost in relation to speed to market and reputational cost of high profile mistakes.

Outsourcing

Investment managers have a number of options when looking to outsource, these can take the form of investment operations outsource– either full or component-based, or technology outsource (ASP). Which route the investment manager chooses to take is a strategic decision. Within the survey, the highest percentage, approximately 50%, intend to outsource completely. Roughly a third of respondents preferred to opt for component-based outsourcing.

Investment managers selecting component-based, or partial, outsourcing typically do so in the areas that cause them most difficulty in-house. Such derivative-related pain points include the areas of collateral management, independent valuation, risk management and performance reporting.

Revel Wood

"Across the asset servicing industry there will be significant change"

Managing collateral pledged in OTC trades is one of the most common types of component-based outsourcing. This can be highly complex for investment managers and can add significant operational risk. Northern Trust, and others, offer a full suite of automated collateral management services. This manages collateral according to the terms of credit support agreements. It makes collateral calls and responds to collateral demands, as well as performing trade reconciliations with counterparties.

An associated service is independent valuation or pricing. Independent pricing, rather than relying on dealer prices, obviously leads to more accurate and objective valuations. Yet finding a cost-effective solution, with coverage across broad product types, can sometimes prove challenging. Asset servicers have the benefit of scale, which means they are able to develop solutions which a single investment management organisation would find more difficult in-house.

Beyond the area of traditional investment managers, in-house managed pension funds that choose to use derivatives are likely to need to outsource, typically having less resource to spend on derivatives systems than investment managers.

Hedge fund managers, too, may decide to outsource to asset servicers. Typically, hedge fund managers outsource all of their middle office and fund administration functions to their prime brokers. As they grow, however, and progress from having one prime broker to multiple prime brokers, some are choosing to move middle office and fund administration functions to an asset servicer.

"Where hedge fund managers have outgrown one prime broker and are now using multiple prime brokers, they see a risk in having a number of different prime brokers collating their books and records," observes Wood. "In these cases, they may prefer to place everything under one roof with an asset servicer."

Automation

Asset servicers and organisations such as DTCC/DerivSERV, which provides electronic matching and confirmation services, are investing substantially in automation and, consequently, the number of failed trades is falling.

According to ISDA's most recent Operations Benchmarking Survey, published in April 2007, outstanding confirmations for large investment banks' credit derivatives trades fell from an average of 16.2 days in 2006 to 5.5 in 2007. There was a reduction to 14 from 50 days for interest rate derivatives and to 21 from around 50 for equity derivatives.

Yet the indications are that investment managers believe that asset servicers may only now be reaching the point where they have sufficient capabilities to qualify as high quality outsourcing partners. In the Global Investor/Morse Survey, the most common reason given for not outsourcing yet (32% of respondents) was the lack of suitable service providers.

These are early days. Substantial resources are being invested by asset servicers to build out their derivatives processing capabilities. This, however, can play to the investment managers' advantage as they have the opportunity to help shape the asset servicers' market offerings.

"The early adopters will get services more aligned with their businesses," comments Wood. "In the early stages, the asset servicers will leverage as much as possible the expertise they gain from the buy side to complement their own expertise. Over time, however, the services offered will become more standardised and commoditised."

Derivatives: aspirations outstripping capabilities

An invited panel of experts and respondents comment on the results of this year's Global Investor derivatives survey.

CHAIR: Dr Chris Sier,
management consultant,
Morse,
chris.sier@morse.com

Andrew Onslow,
head of operations, Morgan Stanley
Investment Management Europe,
andrew.onslow@morganstanley.com

Stephen Forsyth,
management consultant,
Morse,
Steven.forsyth@morse.com

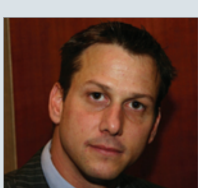
Sikko van Katwijk,
managing director, Citi,
sikko.vankatwijk@citi.com

Rosemary Swales,
director, business development,
DTCC,
rswales@dtcc.com

Dr Jez Bezant,
head of business management investment,
Morley Management,
jez.bezant@morleyfm.com

Shravan Sood,
head of sales broker dealer services,
The Bank of New York Mellon,
shravan.sood@bnymellon.com

Revel Wood,
product manager, derivatives,
Northern Trust,
Revel_Wood@notes.ntrs.com



Tom Willoughby,
manager of derivatives operations,
European Credit Management,
twilloughby@europeancredit.com

The survey covered 50 CIO's or heads of derivatives from a range of institutions with various styles.

They unanimously expressed their enthusiasm for adding derivatives long/short capacities, and agree they all face a major lag in back office processing, the only hurdle hampering the long/short switch. There was an unreserved endorsement from the majority of participants to switch to outsourcing.

While other issues like skills shortages, capacity restrictions and processing errors are still keeping trade volumes surprisingly low, traditional and hedge fund managers alike are ready to expand in the sector. The question is now, what type of outsourcing model is ideal and who is going to offer the solution providers really want.

The survey covered a spread of 50 chief investment officers or heads of derivatives from a range of institutions with various styles: 60% were from large institutions, 30% medium sized managers and 10% boutiques, of which 54% fall into the traditional manager category, 36% have hedging capabilities and 10% are pure hedge fund managers.

Our roundtable participants gathered together in July, pored over the results and offered their insights and comments on some of the more surprising trends to emerge. The panel included:

Slow take up, small volumes

SF: We asked what strategies are currently being offered and planning to be offered, while absolute return on equity long/short are still the biggest strategies, 38% of our respondents are looking to move into equity long/short in the future, so why do they remain so popular?

CS: Is it a capability issue? The aspiration seems to outstrip the current capability.

AO: I think timing might be an aspect, this year managers are able to use derivatives in a UCITS III fund. If you look at Luxembourg, an average fund launch took six months

CS: But why is that horizon six months? Why isn't it twelve, eighteen or three months?

JB: I've got a slightly different view on this, a lot of fund managers have made our funds UCITS III compliant, but haven't actually turned on the derivatives component of those funds.

CS: And that is because of operational limitations?

JB: Most of the time.

"Looking at these results, the reason that outsourcing is not progressing as quickly as expected is because of a lack of confidence in the capability of the suppliers. And that's fundamentally what I think the issue is. "

CS: So what you're saying is that the front office is champing at the bit to start using derivatives and the middle and back office are unable to cope? I have heard that from a number of asset managers in the US.

JB: Yes, I sit in the middle, we don't want to put large numbers of derivatives in the funds, because we don't have yet the confidence that we can put the volume through the systems that we're expecting to get, so you only let through a little bit at a time - it's very much down to managing our operational constraints.

CS: Are volumes going to increase so much that actually the limitation then becomes the front office's ability to choose the correct instruments?

JB: Yes. There's two parts to that. One is having fund managers who've got the necessary skill and experience and, if not, you've got to supplement that somehow. And then in the front office the systems just don't exist for the support of multi-asset fund managers yet.

SK: I think what you see as people are going into derivatives through the UCITS III directive is that they have a skill dilemma and I think that initiates a discussion of whether you should actually look at the derivatives piece outside your normal business process and at outsourcing in a specific area.

Sell side limitations

CS: How about the sell side systems' limitations?

JB: Well I'm not convinced the sell side systems are out there. At least, if they are, then they're large systems based on back office solutions.

RW: I think one of the other difficulties with some traditional sell side systems is that their functionality and hierarchy is formed around the sell side arrangement of company book desk, rather than being portfolio-based. In addition, fund compliance regulation and guidelines like UCITS III are not typically built into sell-side applications.

JB: Yes, I agree, because you essentially get a rates desk, a credit desk, an equity desk, and they don't always share systems

Merging buy and sell side, investment banks

RW: Over the last two years, we've seen merging of the buy and sell side and have become aware that some of the traditional custodians are looking to leverage their investment banking arms.

Investment banks have made a great impact in changing the perception around the use of derivatives through education sessions for the buy-side, including trustees and asset managers. This is mostly focused at buyers (front office) and does not always translate into the same level of training for operations with potential impact on operational risk.

CS: I've worked with investment managers whose principal limitation has been the availability of skilled resources, because they don't have the sort of deep pockets that the sell side has to retain these kind of staff

Yes, so it makes sense to team up with the investment bank or better yet to team up with their independent custodian or service provider for an outsourced solution

AO: We've now set up a separate derivatives operations team, in the asset management business, and 75% of those hires are from our investment banking side.

CS: JPM is a case in point, they've appointed a joint head of the WSS for operations and the investment bank for operations, so obviously even if they haven't done it already, they're clearly thinking of aligning the two sets of operations with one another.

RW: Merging existing custody applications or services with the investment banking arms has been difficult, traditionally there were very clearly defined silos and Chinese walls, and those applications serve very very different purposes. In addition, these organisations are not small, they have large global technologies and the integration effort in changing these monolithic systems is no small task with significant integration complexity.

Front offfice – to outsource or not to outsource?

CS: If we just concentrate on that front office - How feasible is it to build in the timeframe that this little process flow that we've iterated here describes and is there potential for outsourcing that particular front office order management system?

AO: It's highly unlikely there are going to be

"I think there's a lot of capability lacking on the service provider side currently that needs to be built."

efficiencies in just hiving off the derivatives part of that, because, in reality, derivatives aren't only being traded in derivative products, they're being traded throughout an asset manager's books.

SK: We tend to look at it from the demand side, our clients approach us with an NAV process programme, they have either decided that that's not their core competency or they want to know how to integrate derivatives into the overall NAV. If you outsource part of it already, then you need to deal with the rest.

SS: "You ask yourself, what are the core competencies of fund managers, and what are they actually being paid to do? The 21st century is an age of specialisation so it's the non-core, non-revenue-generating functions that one typically looks to outsource. And in any case, when you can't actually find the people to perform the specialised jobs anyway, I think even before you start looking at the economics of "building vs buying" it's almost a slam-dunk case for outsourcing those types of activities."

Confidence

CS: "Looking at these results, the reason that outsourcing is not progressing as quickly as expected is because of a lack of confidence in the capability of the suppliers. And that's fundamentally what I think the issue is. "

RW: Asset managers are being forced into this space and naturally start not knowing the volumes, and thus Excel-based solutions or Access databases. This situation progresses to a tipping point, when they can't manage the volumes and complexity in a manual environment which leads to people questioning: 'do we build, buy, rent through ASP or outsource?

I think the (ASP) rent option is a natural middle stage and many of the vendors have cottoned on to this, and so people are now developing ASP solutions.

We are just starting to see the derivative operation as a component rather than a full investment operations outsource, which is an interesting development, and giving rise to component servicing like collateral management. For us that's an interesting space

Which outsourcing model?

CS: I happen to agree that outsourcing is the way to go for derivatives. The question is what type of model do you choose. Is it a blended? Is it componentised? Or if somebody manages to develop the relevant end to end solution that covers all elements of the process, would that be palatable?

CS: "And the reason why people are adopting this blended model or in-sourcing, and they're potentially regretting it, is because they don't have a palatable alternative. And I'm meaning that in the nicest possible way to the service providers around the table, but I think there's a lot of capability lacking on the service provider side currently that needs to be built."

JB: Our back office is with JP Morgan and the remarkable thing is that when we started to think we've got to do this properly, we went through all of the considerations and realised the only way it's going to work is that you can buy and sell derivatives alongside the cash instrument in the fund that you've got, because we're not necessarily going to stick with the benchmark-based funds that we've got now.

We are going to end up with equity, bonds, both cash and derivative instruments in the same funds in the very near future. So having a separate derivative bit of your organisation just won't work.

Now, JPM already had a derivatives processing unit, already had a collateral management unit and our old back office, which weren't part of the same UK-based organisation. Now they are, which is a turnaround, because they've realised that this something that any future client and indeed the next client to come on the platform, would in fact need.

Ultimately if you don't do derivatives you're going to have to sit back and watch everyone else take your business, and that applies both on the investment management side as well as the outsource provider's side.

SS: Finding a pilot client like Morley, must have been manna from heaven for JP Morgan. There's absolutely no question that they would look to then cross-sell the infrastructure that they've developed for you, to the extent possible, because what they're looking for is minimum efficient scale. And that's the beauty of outsourcing

Enablers

CS: And then how about the other point of view, if you're a small service provider who provides a specific service, like DTCC and SwapsWire, is it easier to attack the asset manager client base alone or in alliance with a service provider who already has a large tied number of clients?

JB: What we found when we spoke with DTCC and SwapsWire is that they said 'Well we aren't really aimed at investment managers, but come along and join us and we'll add things on for you', and it's been fantastic.. . I don't see that the outsourced back office would compete with that, I think it's something that they just need to get involved in and do because it solves so many of the problems in the OTC market.

RS: Yes, and for the flow credit business it provides scalability. The volumes that the banks are putting through now is unbelievable compared to a few years ago. So why wouldn't DTCC want to offer their capabilities to any potential investor in those products?

RW: We try and introduce matching service providers to our front office clients, particularly in the outsource arrangements, because I think they are a great tool to standardise trades and enable efficiency in the confirmation process. We certainly wouldn't try and compete with them.

TW: DTCC is actually reducing the need for back office resources. If we can marry up a few other providers along with DTCC to cover the whole credit space, then yes you might still have outsourcing decisions to make regarding valuations, but your conventional back offices will not be in the same size or even the same cost as they currently are.

RS: Providing the industry, and I am talking about the banks here rather than the buy side, can agree in conjunction with ISDA on standard terms for a product DTCC can get that essentially rolled out to the user community within a couple of weeks and it takes about a week to get a new user onboard.

Accuracy of valuations weighs heaviest on managers minds

CS: The respondents seemed to imply that the availability of appropriately skilled resources and staff was a lower priority than a quest for accurate data for valuations. How do you feel about that?

SS: I'm actually quite surprised to see that accuracy of valuations has ranked so high in the pecking order of issues listed by users. The stats that I've been looking at suggest that OTC derivatives are up 53% year on year, 2006 versus end 2005, to 327 trillion euros in outstanding values. When you've got non-standardised data exchanges, protocols and so on accommodating a 53 % increase without operational bottlenecks would be a tall order for any business!

But our experience is that it's really the backlog of pending confirmations, ETRADE reconciliation issues where the problems lie. And increasing numbers of these trades are now required to be collateralised in a post-Basel II environment especially given recent credit concerns.

CS: From the point of view of an investment manager, the biggest pain they have by far is an incorrect NAV, and an incorrect NAV is a result of a bad pricing. The market issue of outstanding confirmations is less of a pain point for them than all of the fuss that goes around getting valuations sorted out after a pricing issue.

The market I think is due for a rapid growth in a number of directions and it all hinges upon the ability to develop the operational capability to process derivatives. Once somebody comes up with a really really solid solution that is viable, scalable, expandable, not just scalable in terms of volume but in terms of scope, the market's off and running.

CS: All the respondents said 'To a certain degree, we are using spreadsheets still'. But, more frighteningly, the traditional investment manager pretty much two-thirds of the respondents said 'To a certain degree, we're valuing some of these things or pricing some of these things on spreadsheets'. Again, I think it ties into the credibility of the alternatives to provide middle office capability, they don't trust it, but I think in a couple of years it will be down to zero.

SK: Well yes, I agree, and I don't think it's the spreadsheet per se, but it's the way of using it which makes you worry.

RW: I think one of the difficulties is in business to business data transfer, and in obtaining full terms of the trade in a standard format. Our independent valuation services expect trade attributes in a standard electronic format for deliver to and back into your solutions which poses a problem.

Luxembourg and Dublin leading domiciliation plans

CS: The question we put to our survey group was, In which geographical markets do you have or are you planning to have funds domiciled? And overwhelmingly people were saying Luxembourg and Dublin.

SF: I think also the majority of their investors were based in Europe, where there is a familiarity with Luxembourg and Dublin and a preference for their procedures and regulations

AO: It's ultimately driven by distribution

and by where your clients are coming from. For most managers, derivatives are going to be in addition to an existing suite of products, which are already well-established as fund ranges in these domiciles.

SS: The main difference between a hedge fund and a UCITS III fund is that one is unregulated and the other is regulated, whereas the overwhelming choice of the unregulated hedge funds is Cayman and Bermuda, and the overwhelming choices apparently of the regulated UCITS III funds is Luxembourg and Dublin. I'm sure the regulations are the driver for that choice.

Volume of trades lower than expected

SF: The question was how many contracts do you treat annually in the following categories? And with the exchange traded type of instrument, obviously the volumes are greater there than the OTCs, which is probably what you would expect. But the big numbers, the 'over the 5,000s', most of that is coming from the traditional managers, it's not the hedge funds that are providing that huge volume

SK: If you use it as an overlay of your traditional portfolios, then that's going to drive that volume. So no, I'm not surprised.

JB: The low volume of exchange traded credit derivatives is interesting, because that was quite promising, but people I talked to say there's actually no liquidity in the contract, so it's not so attractive. I think a lot of managers are still operationally constrained for credit derivatives.

CS: So you're actively anticipating a surge in that particular product?

JB: Yes because in the pure credit funds, the argument goes at some point liquidity's better in the synthetic rather than the cash instrument, and so all of the transactions you see in the bonds will move into synthetic.

It is difficult to manage scope when derivatives markets change so quickly and it can take up to two years to migrate a strategic platform.

Greatest challenges to current platforms

SF: The survey asked what's the most significant challenges and/or limitations of your current platforms and what are the main reasons your company hasn't outsourced any operations at this stage?

You can broadly split them into two different categories. If you look at the 18% and the 19%, which represent insufficient business benefits and insufficient financial benefits, they could be categorised as the benefits for outsourcing, versus all of the rest.

So the two broad reasons why investment managers haven't outsourced, are that they haven't yet realised the business benefits, or they've looked at the business benefits and are nervous about the options they have.

CS: Personally I think that's quite an interesting comment and it actually gives, from my point of view as a consultant, great mileage because the decision-making process is exactly what we're into helping people achieve and trying to build the business case for why you should and shouldn't outsource.

SK: Well my first comment would be that it's interesting to see the grey area as 32%, because that's probably Jez's colleagues, who've not found their partner yet willing to develop the capability with them.

CS: So essentially, they came to the market, they looked at the market and they decided not to go forward. Was it because they were asking the wrong questions?

SK: Yes, I think most of them have a tendency to shoot into detail and capability-checking, without really thinking why they're actually doing it.

JB: If I hadn't gone down the route that I've gone down now, and I was faced with a multi-million, tens of millions pound bill for building a derivative capability in my existing back office, then I'd want to talk to someone. Okay, they may not have the processing capability now, but if they could convince me they know what to do, and they're just looking for an excuse to build it, I would go with them.

RW: One of the other questions should also be capacity versus capability. From our perspective, onboarding Insight Investment Management to our strategic platform limited our capacity to take on other large investment managers. I think it is something all service providers experience. It is difficult to manage scope when derivatives markets change so quickly and it can take up to two years to migrate a strategic platform.

CS: I think you're right, I think that the market is limited by capacity currently and that is the reason there is not a greater shift between different providers and why people get embedded with a provider and don't move.

SK: But that's how I read that 32% as well. Managers are actually looking at the market they can't enter yet.

SS: Asset managers that don't currently invest in derivatives in a big way believe they can manage their live trades on a spreadsheet, and with home-spun solutions. So there isn't demand for outsourcing there.

But, our experience is that Asian clients are adopting a more robust and scaleable approach to operational outsourcing.

Then there are a residual 32% of managers who have not looked at outsourcing, which is due to the scarce availability of suitable providers. Only big investment managers would seriously consider comprehensive outsourcing.

Frankly, the problem is that the service providers generally lack the industrial strength, or on the shelf solutions which clients can use and bespoke solutions are incredibly resource hungry, meaning the opportunity costs of implementing such mandates can be very high.

business decisions and their impact on

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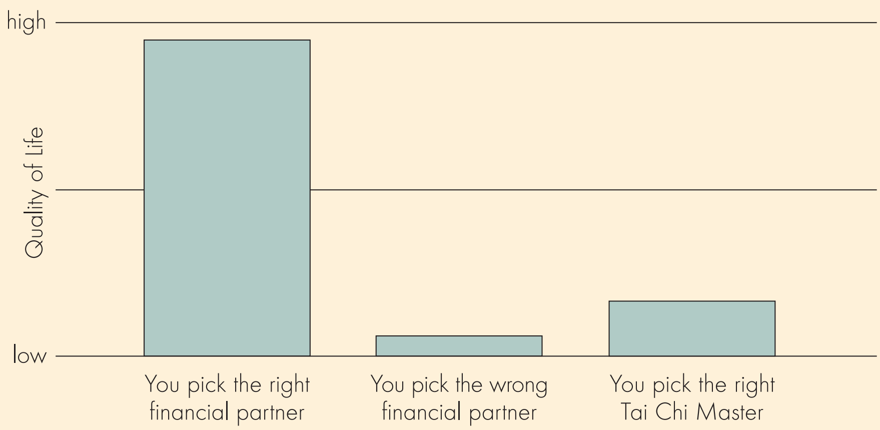

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