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The Impact of Regulation, Monitoring and Algorithms on the OTC Derivatives Market

A survey of investment banks and brokerages

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Introduction

Research methodology

Progress Software commissioned independent specialist technology market research company Vanson Bourne to undertake the research upon which this report is based.

79 interviews were carried out in April and May 2011 with senior decision-makers in the risk, compliance and trade reconciliation in large banks and brokerages which engage in the trading of Over-The-Counter (OTC) derivatives. The research covered the following countries:

- United States of America
- Canada
- United Kingdom

Due to the relatively small number of organisations matching the demographic profile and the highly specialised nature of the questions asked, the research was performed by telephone.

After the global economic crisis, financial institutions are having to evaluate how they trade in the open market. They are facing both internal and external pressures: whilst governments are enacting new legislation to which brokers need to comply with, the brokers themselves want to ensure that they are exposed to as little risk as they can. Though regulation is a concern, they are just as concerned about their existing processes, how they monitor transactions and how they engage in algorithmic trading.

This study examines how those heads of compliance, risk and reconciliation feel about these issues. Are regulations moving too fast? Do they feel that their institution is doing all it can? Are their monitoring systems as strong as possible? Will rogue algorithms become a thing of the past?

As the following pages demonstrate, the big finding is that there are no simple answers. In the main, there is no majority verdict. Different brokers in different territories feel very differently about the same issues. In some cases there are reasons to justify this, but in many circumstances it appears that the road ahead is anything far from certain.

Summary of key findings

Regulation has advantages and disadvantages

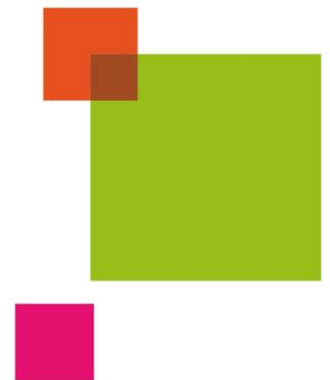
- Only 29% of organisations think that new legislation will not change the way that OTC derivatives are traded.
- Most expect compliance to be beneficial to them. Though 19% merely see compliance as a way to stay out of legal trouble, 51% believe it will provide a competitive advantage.
- But there is uncertainty as to what reforms will do for trading volumes. 48% of those in the UK think that the reforms will decrease the number of trades, compared to only 29% of those in the USA.
- 60% of those in the UK believe the reforms are happening too quickly, compared to 46% of those in the USA and just 15% of Canadian respondents.

Monitoring does not ensure confidence

- Though all organisations interviewed currently monitor their transactions, 63% currently use a third-party solution and 37% use a proprietary system.
- Those with a bespoke solution appear more conservative: they are more likely to be worried about the speed of reform; they are more likely to feel that they need regulators to check all algorithms, and they are more likely to feel that trading volumes will decrease as a result of regulation.
- Regardless of what solution is currently being used, there is no consensus over what asset class will most be affected by Flash Crash-like events in future.

Algorithms need to be reviewed

- 76% of those surveyed said that algorithms need to be reviewed before they are deployed on the market
- It is uncertain who should be in charge of reviewing though. Organisations are most likely to think that brokers themselves should be in charge, but this was cited by only 35%.



Regulation

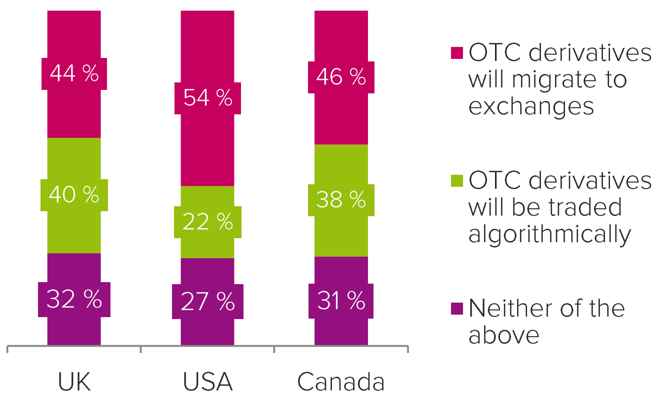
The advantages of new regulation

As a result of the global financial crisis at the end of the last decade, major financial centres are witnessing the development and implementation of new reforms in how the markets are regulated. The Over-The-Counter (OTC) derivatives market is in a period of flux: financial institutions active in the market are beginning the process of re-shaping trading, monitoring and reporting practices to comply with new legislation such as the Dodd-Frank Reform Act.

It is little surprise that the majority of respondents to our survey think that the introduction of this new regulatory framework will bring change to the market. 49% believe that OTC derivatives trading will move to exchanges as a direct result, and 30% believe that OTC derivatives will be traded algorithmically because of these reforms.

New regulation will change trading methodology

The proof: Only around a third of organisations think that new regulations will change how OTC derivatives are traded – 29% overall, but 32% in the UK, 27% in the USA and 31% in Canada.

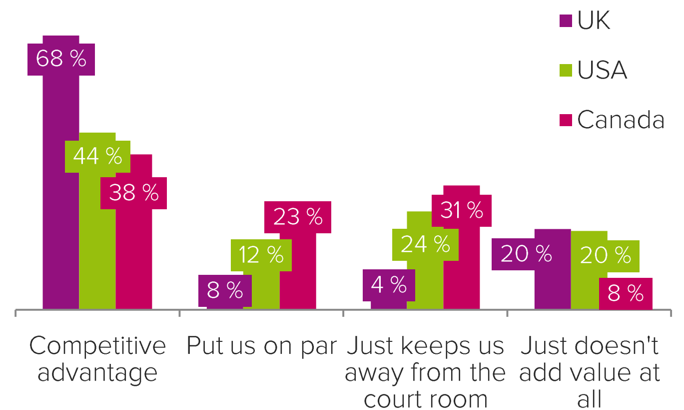


There is a notable difference of opinion on algorithmic trading. Only 22% of those in the USA think there will be an increase in trading through algorithms as a direct result of these reforms, compared to 40% of those in the UK and 38% of those in Canada. So whilst institutions in America might well foresee an increase in algorithmic trading in OTC derivatives, they are not seeing the new regulatory framework as the cause.

Although regulatory changes require institutions to change their processes, in the main compliance with the reforms is not seen as lacking value.

Compliance is beneficial

The proof: Only 18% of those surveyed said that being fully compliant with new regulations offers them no value of any kind.



The point: The majority see compliance as giving them some form of advantage, even if for many it is the shallow advantage of being legal-to-trade. What is significant is that the majority see compliance as being about more than keeping them away from the court room: specifically, the majority of all organisations interviewed said that reforms will give them a competitive advantage – 51% report this, rising to as many as 68% of those interviewed in the UK.

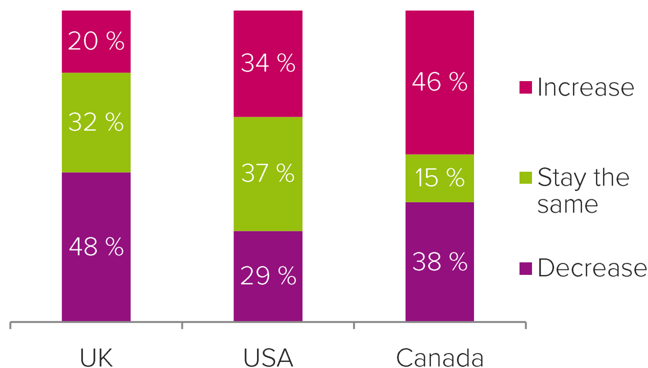
The disadvantages of new regulation

So trading companies recognise that the reforms will be of value to them. But how do those companies expect the reforms to hit trading volumes? Does the stark light of regulation cause participants to melt away or encourage new ones to join the game?

The research suggests that although these financial institutions do think that the reforms will give them a competitive advantage, there is a fear that reforms will not necessarily grow the market.

Will regulation cause trade volumes to decrease?

The proof: Indeed, 37% believe that trading volumes will decrease as a direct result of regulatory reforms; in the UK where there is such a strong opinion that new regulations will give a competitive advantage, almost half (48%) believe that the number of trades being made will decrease. By comparison, almost half of those in Canada (46%) believe that the reforms will increase trading volumes.



That is not to say that the rest believe that trading volumes will increase. Though 37% said that they anticipate volumes to decrease, only 32% believe that volumes will go up. The remaining 31% believe that the number of trades will remain at present levels. Given that near equal numbers of organisations believe that the market will increase, will decrease, or remain static, this suggests an uncertainty of the impact of the reforms on trading volumes.

Concern over data volumes is not the only place where there are significant differences of opinion between territories:

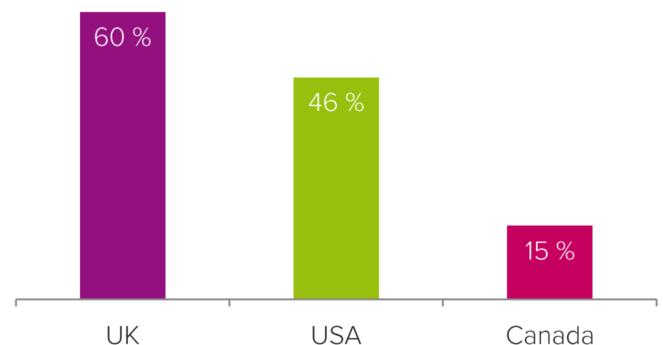
- The threat of litigation

  When asked about the benefits of compliance with new regulations, some stated that it kept them away from the court room. In the UK this is not too much of a concern, as only 4% reported this as a benefit. However, in both the USA and Canada a significant number cited this as a benefit: 31% in Canada and 24% in the USA. Clearly the risk of legal action is a worry in North America, probably due to the culture of litigation coupled to recent high profile court cases.

- The speed of reform

Are regulators moving too quickly?

The proof: There is a significant difference of opinion as to whether or not regulatory bodies like the SEC and FSA are moving too quickly.



The point: One might expect that those who think that regulatory bodies are moving too quickly are also those who think that reforms are happening too quickly, but the research shows the reverse to be true. 60% of those in the UK said that regulatory bodies like the SEC and FSA are moving too fast; in the USA 46% believe this – still a substantial percentage, and much higher than in Canada where only 15% said the same.

We could draw several conclusions from this. It may be that those in the USA and Canada see regulation a good thing: the regulations have not been rushed through, and because they have been thoroughly researched and the legislators understand the situation, they believe that they regulations will bring clarity to the trading process and ensure a stiff set of rules by which to operate.

Equally we might also infer from this that UK traders are somewhat pessimistic about the immediate future, that they would prefer the status quo to persist and see the reforms as stifling growth, hence the concern that the introduction of new legislation is happening too quickly.

Regardless of the advantages and disadvantages ...

It is clear that the majority believe that fundamental changes will happen as a result of these reforms. Whether organisations believe that trading volumes will increase, decrease or remain static, the majority feels that the OTC derivatives market will change. Some might see the changes as good, some as bad, but regardless: the majority see changes happening soon.

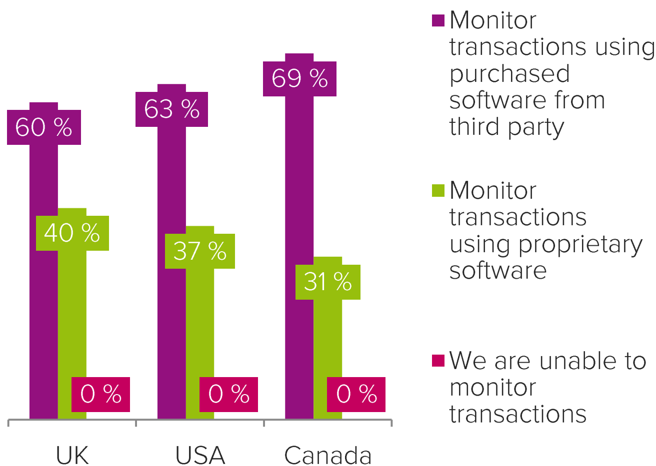
Monitoring

Universal usage

Every organisation we spoke to said that they had software in place that watches for possible fraud, user error and fat-finger trading when trading in OTC derivatives.

All financial institutions monitor their transactions

The proof: All organisations we approached told us that they are able to monitor transactions from pre- to post-trade in order to prevent fraud, errors and fat finger trading.



The majority purchase such software from a third party provider; on average only 37% say that the software they use to monitor trading transactions is a proprietary solution tailored to their circumstances. This percentage differs little across the countries surveyed. The low use of proprietary solutions suggests that, for most, specialist third party suppliers have solutions that adequately serve their needs.

Problems with proprietary solutions?

Are there any differences in how users of a custom-designed monitoring solution responded to our questions compared to those with an off-the-shelf package? Analysing the results of the research to look for differences here suggests that there is a correlation, perhaps a causality:

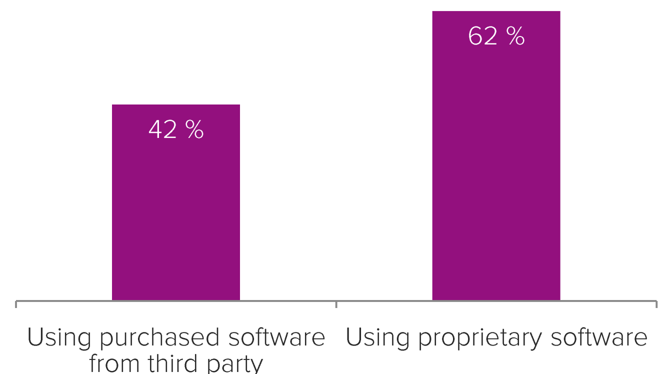
- Speed of regulatory change

  Those with proprietary software for monitoring transactions are notably more likely to think that regulatory bodies are moving too quickly. 52% reported this, compared to just 42% of those with third-party software.

- Desire for regulators to help with algorithms

All financial institutions monitor their transactions

The proof: They are much more likely to think that regulators should step in to review algorithmic strategies before market participants deploy those algorithms into the market. 62% told us this versus just 42% of those who are monitoring trades with third-party solutions.



- ### Pessimistic about volume increases

  Those with bespoke monitoring solutions are more likely to think that the volume of transactions will decrease as a direct result of new regulations. 45% report this, whereas just 32% of those using third-party software say the same.

These numbers may be coincidental but they do combine to paint a picture. Those using bespoke solutions could be characterised as lacking the agility that change requires, needing more time to prepare, and fear the market might move on and leave them behind to some extent. They think that regulatory bodies are moving too fast, that trading volumes will decrease as a result and that algorithms need to be overseen by the regulators rather than themselves. This paints a picture of organisations with comparatively weaker – perhaps older, more rigid – systems. Overall, those with bespoke monitoring solutions have a much more cynical view of the future, one not held by their peers with third-party solutions.

That is not to say that those with third-party solutions are in a universally better position. We asked respondents what asset class would be most likely to be affected by the next event like the Flash Crash of 2010. The answers that were given were very similar regardless of third-party or bespoke monitoring solutions, but what is startling is that there is no consensus over what group would be most affected. A near equal amount selected futures and options (24%), energy (20%) and foreign exchange (20%), with a minority selecting commodities (35%). Despite the universal monitoring processes in place, there is uncertainty about the future of the market. There is no majority view as to the most at-risk asset classes, and though this does not suggest that current systems are flawed, it does suggest that financial institutions need to have excellent visibility across all asset classes because they do not know which is the most at risk.

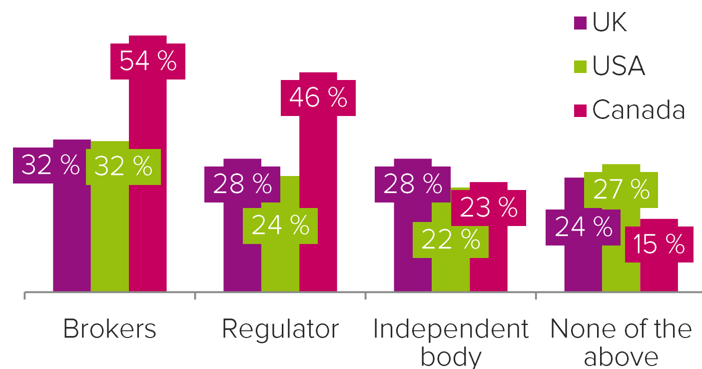
Algorithms

The need for review

Algorithmic trading has taken some blame for a number of incidents in the markets over the past decade. Though the extent of their role in the global financial crisis is contentious, our research suggests that the industry feels that algorithms need to be carefully monitored before they are put into action in the market.

Algorithms need reviewing before going to market

The proof: 76% of those surveyed said that algorithms should be reviewed before they are deployed on the market.



The point: But who should be primarily concerned with this review process is a controversial topic. As elsewhere, there is no majority view; the most-cited answer is that 35% believe that brokers themselves should be reviewing the algorithms. This in itself is a surprise: though it is likely that brokers should think that they are the ones who should review their own processes, it is odd that 65% do not feel that they should review their algorithms before deployment. 29% believe that regulators should be in charge of reviewing, though this rises to 46% in Canada.

Algorithms driving market growth?

Despite this lack of clarity, there is a significant correlation between algorithms and trading volumes.

The link between algorithms and market growth

The proof: 44% of those who expect trading volumes to increase also say that new regulations will cause OTC derivatives to be traded algorithmically; only 20% of those who think trading volumes will remain static and 28% of those who think volumes will decrease think that regulations will cause OTC derivatives to be traded algorithmically.

The point: Simply put: those who think that trading volumes will increase are much more likely to think that regulation changes will encourage algorithmic trading.

This predicted growth could have severe implications throughout the markets and the trade reconciliation process, especially given that financial institutions say that rogue algorithms are inescapable. 67% said this, rising to as much as 78% in the USA. Notably, those who use third-party solutions to monitor their trade reconciliation process feel the most strongly about this: 72% of them think that rogue algorithms are here to stay, compared to 59% of those using proprietary systems. This may suggest that they are planning for the worst and have systems that allow them to do so, whereas those with proprietary systems struggle to do this. Regardless, the majority believe that rogue algorithms are not going away, so the best possible safeguards against them need to be in place.