Reaping strategic benefits from mandatory trade reporting

Many organisations are in the midst of wide ranging projects to fulfil regulatory requirements in the arena of derivatives trade reporting, typically driven by EMIR. Can the necessary effort being deployed to address mandatory trade reporting be used to strategic advantage elsewhere?

Message Automation's Hugh Daly discusses whether all that IT spend creates the opportunity to generate real benefits.

G20 Re-cap

This is not another article on the implications of DFA and EMIR. If you need full details now, you are probably too late. But for those a little bit fuzzy on the subject, some reminder of context is appropriate.

These new regulators demands are the result from the Pittsburgh G20 summit in September 2009. The Over The Counter Derivatives market was identified as a major contributor to the confusion and fear in the market in 2008. The relevant core principles in this context were to increase transparency and to reduce counterparty risk. These goals have been translated into global initiatives such as mandatory clearing of OTC Derivatives, increased use of collateral and intra-day trade reporting.

The actual regulations as implemented by each national or regional regulator are their interpretation of the core principles. Names that will probably be familiar are "Dodd-Frank" and "EMIR". These are the key legislation governing the U.S. and directive governing the European Union but there are similar regulations of varying flavours in other regions, especially Asia Pacific.

In some cases more than one regulator impacts a single jurisdiction. In the U.S. the legislation is being interpreted by two national regulators – the Securities Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC). In Europe the individual national regulators have a say as well as the European Securities and Markets Authority (ESMA).

Although the timelines agreed in Pittsburgh were aggressive, and many would say unrealistic, the Americans have not missed the deadlines by much. The rest of the world may be lagging, but is still pushing ahead with implementation. Even now, EMIR deadlines seem fluid for mandatory clearing and trade reporting.

Some institutions believe this is a minor annoyance – others have nine figure budgets to address the G20 impact across the organisation. (In dollars not yen!)

Reporting Challenges

The concept of near time reporting of all derivatives trades is new, and poses huge challenges to almost all market participants of any size. Even the T+1 reporting mandated under the European regime poses challenges. For those not immersed in these projects already, it is worthwhile exploring some of these challenges a little more. It is not just another reporting overhead, it is very significant.

From our current conversations with market participants facing EMIR, many are fixated on the infamous "85 fields". Those who think that does not sound too bad seem to be missing the catch - some of these will be populated from a variety of sources, and fields may be populated within different data elements for different products types.

Data enrichment

The immediate challenge is obvious – sourcing the data from your trading systems and ensuring the accuracy and completeness of the data submitted to the trade repositories.

There is an obvious (and non-trivial) requirement for mapping of source formats to those required by, for example, the DTCC's Global Trade Repository, REGIS-TR or UnaVista. But in addition it is highly likely that not all of the data required is freely available from a single source system. Hence enrichment of the data will be required.

Examples of where data is held in diverse places might be counterparty static, trade level valuations, and collateral details. All of these are required as part of the EMIR reporting process. The technical processes for enrichment are similar to many previous projects, but there is a significant business analysis phase to identity the gaps and from where to fill them.

Multiple Asset Classes

The reporting obligations are framed such that they cover the range of OTC asset classes: Interest Rates Derivatives; Credit Derivatives; Equity Derivatives; Commodity Derivatives; and Foreign Exchange Derivatives. Although exempt from Dodd Frank obligations, Exchange Traded Derivatives are included within scope for EMIR.

The challenge in this context is two-fold –resourcing across such a range of products – and typically across asset class specific "silos". The majority of organisations have more than one primary trading system in which these diverse trades are captured and processed.

Cross silo products

In the typical siloed model, where different asset classes are booked in different primary systems, or different versions of the same system, often there are some trades that do not conform to the high level model. Examples might be an associated foreign deal exchange booked in a commodities system or a rates application. The vagaries of how trading of products is divided between silos is not always "clean" – so some products might have to be mapped to the mandated regulatory format from more than one source system.

Product Taxonomies

Every organisation has at least one pre-existing product taxonomy or hierarchy, and frequently one per business application. There may be historic mapping tables between front office product booking types and back office, or front office and risk. Sometimes these translations are subsumed in archaic interfaces, or are maintained as a simplistic many to one relationship table as a best effort to cope with constraints of legacy downstream systems.

Unfortunately the externally mandated product taxonomy for regulatory reporting, such as the CFTC's Unique Product Identifier, is highly unlikely to map conveniently to any of the organisation's existing product hierarchies. It may not be a straightforward one to one or many to one, so even determining the correct UPI becomes a challenge. In addition different regulators may mandate different product identifiers.

Nexus determination

Clearly many organisations may be impacted by more than one jurisdiction. It is quite probable that a single trade should be reported under more than one regime. The regulations across the globe have not yet all been finalised. Take an example: a U.S. Bank trades an equity option with a European Asset Manager but where the underlyer is an Australian equity. This trade in theory would be reported multiple times – under CFTC, ESMA and ASIC regulations.

Regime determination in global markets is not simple; added complexity comes from each of the G20 regulators having similar but not identical approaches to implementing the principles.

Industrialising the solution

Operational Impact

Although the EMIR regulations do not require intra-day or near-time reporting, there are still complexities – for example over Unique Trade Identifier. With such lack of clarity even at this late stage we believe that "breaks" are still inevitable.

Hopefully your current level of STP exceptions experienced is a small percentage, but surely it is realistic to assume that a similar scenario will occur with reporting - it will not be 100% perfect, out of the box, day one. It may be an iterative process of improving STP rates and reducing breaks.

Depending on the success of the competitive offerings for EMIR it is quite possible or even likely that the same trade may be represented in more than one Trade Repository. Although there is an obligation for the repositories to reconcile between themselves, there is no obligation on them to remediate the exceptions, only to point them out.

Even if we believe that 100% STP is achievable, unfortunately your counterparties cannot be totally relied on to have had equivalent success. It would be imprudent not assume at least some manual overhead from trade reporting.

Importantly, this is a new discipline – there is no existing operations team performing this function. Secondly, once put in place, these operations people need exception management, tracking, and workflow systems to help. It is better to plan for this eventuality (stable door) rather than try to remediate a large population of existing exceptions (bolted horse)

Reconciliations

Fundamentally, the move to central clearing and trade reporting creates at least two new representations of your trade population.

The main issue to grapple with is that the external copy is the truth. In a bi-lateral world, you win some, you lose some on breaks – the law of averages implies you would be correct on half of your disagreements with counterparties (after an adjustment for relative competence!) When disagreeing with a clearing house, you are simply wrong. Hence performing a population reconciliation between your book and records and each of the CCPs is essential.

With trade reporting the need for reconciliation is even greater. You are signing off to the regulator to state the population in the trade repository is accurate. And yet, some of the trades may not even have been reported by you, but by your counterparty, or a clearing house. The added complexities of continuation reporting, valuations, multiple jurisdictions and competing repositories etc. give huge scope for errors and omissions.

As well as operational best practice, there is mandated portfolio reconciliation to cope with as well. The regulations state the frequency of reconciliation required according to the size of a counterparty portfolio. This does prompt the question - if you can reconcile something weekly why would you not do it daily? Unless of course there is too much manual intervention required. If that is the case, the process needs fixing. The EMIR regulations also mandate reconciliations so, again, avoiding Dodd Frank does not get you out of jail on this.

Strategic Opportunities

So, all bad news so far. Poorly defined requirements, project risks, pressurised deadlines, regulatory imperatives, and plenty of scarce resources required with little or no choice. Surely there is some silver lining to the G20 cloud? We believe so.

Data warehouse by stealth?	Many organisations have spotted that describing all trades in an externally recognised fashion, across asset class, is something that is non-trivial – if easily achieved, it would have been done already. But that is exactly what is being asked of the industry in order to report trades and subsequent valuations, collateral implications and so on.
Re-use of consistent product taxonomy	For perhaps the first time, all your trades across siloes will have been classified according to a single product hierarchy. The taxonomy may not be exactly to your liking, but it is consistent and clearly understood by external parties (and new joiners from elsewhere). There are clear opportunities to use this in better risk management, management reporting, FOBO recs. It also should make future migrations and system replacements easier and subsequent valuations, collateral implications and so on.
Single platform for cleared and bilateral OTC provides for consistent customer view.	We do not yet know exactly what percentage of customer deals will be cleared and how respective volumes of the two flavours will go, although we can take an educated guess. The changes implemented for trade reporting, with a little imagination, provide opportunities for improving your customer experience. Whether this is in static reporting or in a real time customer portal, having the underlying trades in a single place with a common representation should allow for easier presentation. When you add in to the mix that EMIR is forcing reporting of exchange traded derivatives this becomes even more compelling – for example Commodities OTC trades and Commodities futures trades will all be available in one place in one format.
Client master database	Again, trade reporting forces the organisation to have a consistent view of counterparty data. Work probably needs to be done for domicile and almost certainly reporting classification - swap dealer and major swap participant are new concepts. It may not yet use the mandatory Legal Entity Identifiers. Some organisations already have a master database so this can be extended to cover the new requirements. If this does not exist, there probably is no time to create one – merely time to reflect on the decision not to build it when someone suggested it ages ago. However, it should provide a rationale for creating it now, so again if possible think creatively about more strategic use.
Single abstraction layer	Having implemented a cross-asset class solution for reporting you will have created a single platform for connecting to the external world. All trades (whether reportable or not) can be made available in a single common format on this platform. This same platform can act as a single abstraction layer for other functions – clearing connectivity, affirmation connectivity, inbound clearing reporting, and collateral communications. Numerous current and future bi-lateral connections from internal applications to external third parties – pieces of pipe – can be eliminated. (This may sound too good to be true, but on examination of the detail, this assertion holds up in the real world. For example if you have three internal applications and three CCPs, you need nine pieces of pipe, whereas with an abstraction layer it is only six. But adding a fourth CCP is one more link instead of three, and so on.)

Internal data standard	
	In addition to the use of the platform, there is significant scope for re-use of data mappings created; if compliant with Dodd Frank you will have enforced use of FpML, and probably by the end of the EMIR project, all your products (included listed derivatives) will have been mapped from your various source systems into a common representation. From here it does not take a genius to work out you have now created a common internal data standard. This standard can be used for all internal interfacing throughout the organisation with significant benefits. In addition to the interfacing benefits of data from different systems being in a common format, there are also opportunities in new and improved reconciliations. The full trade economics are now available, not just the headline fields (as they have been reported). Daily valuations are being collated centrally and reported. Furthermore, having all trade data expressed in a consistent manner across the organisation creates a unique opportunity to apply business rules. Enforcing both data quality and booking practises is now acheivable without multiple separate development projects. The rules can be maintained against the single standard.

Control Framework

When viewing these potential benefits as a whole, one can see that together they can become the building blocks of an internal control framework. The trade lifecycle is changing for OTCs, with significant new external events: reporting, clearing, and continuation reporting. Valuations are supplied from clearing houses. Reporting on behalf of clients is another opportunity for something to go wrong.

With data in a common format, and a single platform orchestrating external connectivity, it is easier than at any time before to implement a cross asset class, cross functional control framework. By adding output from reconciliations, to the organisation's knowledge about affirmation/confirmation status, clearing status and reporting status, can provide a genuine picture of a trade.

By aggregating knowledge from these diverse control points, operations are then able to triage investigations. People can focus on trades broken in more than one place as there is more likely to be a major problem.

At a high level, having the breadth of information readily available in a single location can assist with resource planning and assessing operational efficiency. Also, route cause analysis, trends and bottlenecks can be more easily identified.

These potential benefits of a control framework have always been known – but seemed unattainable. Data was too fragmented and any project to harmonise this was dismissed as too ambitious. And yet many of those stumbling blocks may well have been removed as a by-product of the current regulatory initiatives.

The impact of the other G20 principles

Swap Execution Facilities – will this lead to dis-intermediation of affirmation services?

Looking forwards, an unknown number of SEFs will gain critical mass, with sufficient liquidity to provide the pricing transparency intended by the regulators. However, there remains the possibility of the affirmation platforms being removed from the post trade flow. If the SEFs send trades directly to the CCPs, then affirmation become unnecessary. However, a lot of connectivity infrastructure is still being designed with these services as a key component. This now includes trade reporting. It is worth considering if you will want to send trades to the affirmation services purely so they can be reported, as they have been executed on a SEF.

The final trade lifecycle landscape is still taking shape, but in particular how pre-deal limit checking models will be implemented in the SEF world remains uncertain.

So keeping your connectivity options open seems prudent. Increasing reliance on a single third party service provider for multiple business functions may restrict flexibility in the future. It almost certainly eliminates any chance of first mover advantage

Prepare for the new collateral challenges

The subject of collateral changes is too broad to tackle in detail here. But the same opportunities arise. To achieve the holy grails of cross asset class margining and efficient collateral optimization, a pre-requisite is the simple ability to provide a single view.

Breaking down silos is notoriously difficult (technically and politically.) But the work done for trade reporting will have done much of the work required – mapping diverse formats from multiple systems across asset class into a consistent view. And again, with EMIR coming into force, this will include listed derivatives.

There will be revenue opportunities arising from collateral transformation and arbitrage, but only for those able to handle the increased velocity. Phone calls and e-mails will not work in this intra-day margining world, so now is a good time to think ahead on your collateral messaging framework as well as the functional applications to support the business.

Threats

Despite the vitriol, and financial penalties being thrown at the financial services industry ("the bankers") across the globe there remains a huge pool of experience and creativity. This may be lying low for now, and any resurgence is more likely to become apparent in the super hedge funds. These are fundamentally just like the proprietary trading desks of the big banks, re-created on the "buy side".

Traders will be traders and they love to circumvent controls – internal or external. Exploiting loopholes and sailing close to the wind is what they do. So whisper it for now, but OTC trading is not going away, and innovative, privately negotiated, bespoke strategies will still happen. (Perhaps someone can come up with the new name.)

However, from a technology standpoint, locking down processes to fit the assumed migration to a pseudo exchange-traded model and the demise of OTC may have unintended consequences. It may simply transfer the burden back to unstructured middle and back office processes - often known as "Excel"! Neglecting the problems of bi-lateral trades (that have never really been fully addressed) may seem pragmatic as more and more volume is standardised and cleared, but the profit and risk may still be in the rump of non-standard trades. So when building the architecture perhaps this should not be an afterthought.

At a practical level, trying to re-use the firm's existing listed derivatives infrastructure for cleared OTC has some appeal, but is not a cure-all. The bells and whistles that can be attached to, for example, futures trades are far fewer than all the flavours of interest rate swap so the data challenge has not really gone away. However, OTC clearing does help address the post trade events.

Of course the biggest threat to global markets is the one we have not recognised yet. Look back at the thousands of people across the world's banks devoted to previous regulatory initiatives. The armies of consultant devoted to implementing Sarbannes-Oxley and MIFID. Did that help in any way when it got serious? So let us hope that now devoting all these resources to the G20 principles does not mean everyone's eyes are off the ball, or on the wrong ball!

Summary

If some of this resonates, it may be you are now thinking "That's all very well, but with these ridiculously tight regulatory deadlines how can I possibly take time to think strategic or long term?" Being glib the response could be "Can you afford not to?" However, the fact remains that for same cost, effort and time, the tactical solution you implement can be the foundation of a far more strategic solution.

Fundamentally, to design a solution with an eye on reaping some future benefits may be as easy, or rather, no more difficult, than cobbling something together to meet the deadlines. This is a great chance to deliver :

- vastly improved data quality leading to improved STP and management information such as route causes
- lower risk for implementations, migrations and system replacements in future
- a non-siloed, trading-system-agnostic, exception management and human workflow process that can be built out for other business purposes
- a single control framework aggregating knowledge of trade breaks at multiple internal and external touch points

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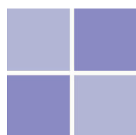

About Message Automation

Message Automation is a specialist company completely focused on assisting organisations improve the efficiency of their derivatives processing. This includes OTC clearing, affrimation, reconciliation and reporting. Our clients include several global banks and buy side firms.

The company's flagship **future**LANDSCAPE solution has been implemented extremely quickly in tier one environments and is designed to handle the known unknowns and tight timescales of the post Pittsburgh G20 era. The platform works across all asset classes to provide consistent rules based processing of trade information.

About the Author

Hugh Daly is Chief Executive of Message Automation. Having started in international banking Hugh moved into banking consultancy in Central and Eastern Europe and the Far East. Prior to co-founding the company in 2003, he held executive roles with core banking vendor Financial Objects.