ISSA

International Securities Services Association

ISSA Symposium 17

20 – 23 May 2014

An Account of Proceedings

By Dominic Hobson

31 May 2014

Table of Contents

Adaptation of the business model to compliance demands **2**

A message from a regulator **7**

Practical application of technology to solve regulatory challenges **10**

Infrastructural regulatory challenges (CPSS IOSCO Principles 14 and 19) **14**

Collateral management **17**

Out of network assets **19**

Adaptation of the business model to compliance demands[1]

Historically, the regulatory burden laid on the securities services industry was relatively light. Recent events suggest custodian banks now face an increased level of regulatory risk. In January 2014, for example, Clearstream Banking paid $151.902 million to settle potential civil liabilities of up to $5.626 billion arising from the fact that it had served as the channel by which the Central Bank of Iran, a sanctioned country, held securities in the United States.

The principal issue, named by the Office of Foreign Assets Control (OFAC), was that the securities were held in an account structure which meant that their beneficial ownership was not transparent to Clearstream. Unfortunately, that account structure is the standard model in the custody industry: namely, the omnibus account.

Custodians use omnibus accounts, which substitute intermediaries for beneficial owners and commingle fungible interests in securities, not because they wish to conceal beneficiaries, but because they are operationally efficient. For that reason, custodians are reluctant to enter new markets where omnibus accounts are not available. In fact, settlement on the shorter settlement timetable of T+2 as envisaged by T2S in Europe, is unworkable without omnibus accounts, which is why the European Central Bank (ECB) has preserved them in T2S.

There is also concern that, without omnibus accounts, it will be impossible to mobilize collateral efficiently. There is already evidence that omnibus accounts also increase liquidity: transactional activity is higher in markets with omnibus accounts. However, omnibus accounts also mean that sub-custodians lack visibility into the owners of the securities they hold in custody. At present, they take comfort from the fact that intermediaries are regulated, and expected to conduct Know Your Customer (KYC) screening.

Until recently, regulators did little to disturb the view that it is sufficient to rely on these assurances. In 2003, two regulators in the United States, the Financial Crimes Enforcement Network (FinCEN) and the Securities and Exchange Commission (SEC), issued guidance on the treatment of omnibus accounts under the PATRIOT Act. It advised that broker-dealers did not need to look through omnibus accounts to beneficial owners. This advice was affirmed by the United States Treasury department in 2003, and reaffirmed by the Commodity Futures Trading Commission (CFTC) and the SEC in 2006.

Similarly, an IOSCO paper of 2004 urged banks to identify clients to prevent fraud and market abuse, and to conduct specific client due diligence for omnibus accounts, but stopped short of obliging banks to look behind omnibus accounts.[2] Instead, it proposed that banks judge the KYC procedures and due diligence processes of holders of omnibus accounts, and the quality of the regulatory regime of country where they are based.

---

[1] ISSA Working Group, *Transparency in Securities Transaction and Custody Chains*, 22 April 2014.

[2] International Organization of Securities Commissions, *Principles on Client Identification and Beneficial Ownership for the Securities Industry*, May 2004.

However, recent regulatory developments suggest continuing reliance on the regulation and KYC procedures of intermediaries may be misplaced. As long ago as 2009, the Committee of Experts on the Evaluation of Anti-Money Laundering Measures (MONEYVAL), which meets under the auspices of the Financial Action Task Force (FATF), noted that "a vulnerability to money laundering exists because a securities intermediary may not know the beneficial owner of an investment if held in an omnibus account maintained for a (foreign) financial institution."

In announcing the Clearstream settlement in January 2014, OFAC director Adam Szubin stated publicly that "omnibus and custody accounts require scrutiny to ensure compliance with relevant sanctions laws." The guidance issued by OFAC suggested custodians make customers aware of their sanctions compliance obligations; conduct due diligence to identify customers who might be doing business with sanctioned countries; monitor accounts for unusual activities; restrict services provided to "high risk" counterparties, including their ability to operate through omnibus accounts; and investigate the nature and purpose of omnibus accounts.

Other developments point the same way. UniDroit is pressing for segregation of securities in the name of the beneficial owner as a principle of international securities law (though it is improbable that regulators will ordain this universally). Rule 613, issued by the SEC, now obliges broker-dealers to establish an audit trail of securities transactions so that intermediaries know at every stage in a transaction the identity of both the buyer and the seller. In Europe, the Market Abuse Directive (MAD), adopted by the European Parliament in January 2014 and scheduled for transposition into national laws in 2016, will extend the criminalization of the "aiding and abetting" of market abuse from the cash to the OTC markets, where a great many securities trades take place.

In other words, it is no longer sufficient for holders of omnibus accounts to rely on the fact that a counterparty is regulated in a respectable jurisdiction, and will have conducted sufficient KYC due diligence. The clear implication is that omnibus accounts must be scrutinized by custodians to ensure compliance with sanctions and other compliance obligations, including the conduct of due diligence on the beneficial owners of the securities in custody with sub-custodians.

The measures adopted by the payments industry to deal with similar issues offer some guidance to the securities services industry. The Anti-Money Laundering Principles for Correspondent Banking, agreed by 11 international banks meeting as the Wolfsberg Group, state explicitly that banks can no longer rely on the fact a foreign correspondent bank is properly regulated, but must conduct a full due diligence assessment, and understand its "downstream relationships."

Equally, the SWIFT MT 202/5 message series has since 2009 ensured that correspondent banks always know the identity of the payor and the payee. Though this has increased the operational costs and risks of the correspondent banking industry, the Basel Committee on Banking Supervision argued the same year that existing message standards did not go far enough in delivering full transparency

for banks intermediating payments, because they do not carry information about originators and end-beneficiaries.[1]

Recommendation 13 on best practice in anti-money laundering published by the Financial Action Task Force (FATF) in February 2013 obliges correspondent banks to conduct full due diligence on correspondents, assess their anti-money laundering controls, ask senior management if the relationship is acceptable, and ensure the correspondent has conducted thorough customer due diligence.

Importantly, FATF includes entities that are trading, underwriting, managing, administering or safekeeping securities within its definition of financial institutions subject to its best practices, and warns it is keeping the securities industry "under consideration." In addition, the interpretive note to Recommendation 13 stipulates that the same criteria should be applied to "securities transactions or funds transfers, whether for the cross-border financial institution as principal or for its customers." [2]

In other words, the FATF is saying that its expectations for correspondent banking apply also to the securities industry. It is not surprising. After all, securities transactions drive half the payments volumes at SWIFT, and central securities depositories (CSDs) are generating settlement values equivalent in size to those of high value real-time gross settlement (RTGS) payments systems of US$0.5-1.5 trillion a day, yet custodians are transferring assets between counterparties whose identities are not known to them.

The important question is what the securities services industry can do to meet rising regulatory expectations. One principle that should inform all solutions is that "intermediaries served by a custodian, depository or settlement agent must put their provider in a position to comply at all times with the provider's own standards, applicable laws and regulations." In other words, custodian banks must always be able to live up to their own standards, irrespective of the counterparties they interact with, which entails checking that every counterparty adheres to standards equivalent to its own.

In terms of putting principle into practice, solutions divide between best practices and technical measures. In terms of best practices, a securities industry equivalent of the Wolfsberg Group principles for correspondent banks is an obvious option, but the securities industry is not under the same pressure as the payments industry was to develop messages that disclose the identity of beneficial owners. In fact better due diligence on counterparties may not be adequate. There is also a risk that a list of best practices attracts the attention of regulators, and creates a fresh regulatory risk for banks.

[1] Basel Committee on Banking Supervision; *Due diligence and transparency regarding cover payment messages related to cross-border wire transfers*, May 2009.

[2] Recommendation 13, "Correspondent banking," Financial Action Task Force, *International Standards on Combating Money Laundering and the Financing of Terrorism and Proliferation*, February 2013, page 16, and Interpretive Note, page 69.

A more meaningful answer is to regulate the omnibus account structure. An extreme solution is to abandon the use of omnibus accounts altogether, but this would be of limited value, in that it would unveil the principals to the transaction only and not their clients. A compromise solution is to regulate the conditions under which omnibus accounts are used. For example, they could be offered only to counterparties based in countries whose standards match those of the custodian, or which match commonly agreed international standards, or which have endorsed a set of best practice principles.

Technical solutions are of two kinds. The first is to develop a securities industry equivalent of the MT 202/5 message set in the payments industry. This is a low cost and readily available way of using existing SWIFT technology to ensure counterparties are identified, authenticated and traceable through an audit trail, while leaving existing account structures intact, and avoiding investment in meeting an agreed set of standards. SWIFT is the logical entity to capture and report information to the regulator.

However, costs would be high for banks without a SWIFT capability, and screening would work only for counterparties that are already identified, which implies universal access to a KYC utility or database. Banks investing in their own KYC facilities will not be eager to duplicate the investment, even though KYC is not a competitive differentiator. Thanks to the higher cost of assessment in high risk jurisdictions, commercial pressures would deter business with counterparties in high risk countries.

The second technical solution is the so-called "handshake" model, by which each regulated intermediary in a securities transaction communicates to the next institution in the transaction chain details of its principal. It is economical, in the sense that counterparties do not need to see all of the information about a transaction, requires less investment in technology, and there is no need to create an aggregate database. It also affords a measure of data protection.

The "handshake" methodology also matches principles of information-sharing through the transaction already established by SEC Rule 613, and in Europe by the Shareholder Rights Directive, which is now being revised. However, the "handshake" model will not work well across borders unless regulators agree a common standard of disclosure, which is unlikely, and disclosures at every point on the transaction chain force regulators to work harder to identify unwelcome counterparties.

In terms of their data-gathering implications for the securities services industry, the message standard and the "handshake" method are not that different. Agreement is needed in both cases on what information should be collected - such as name, address, management structure, beneficial owner, recent enforcement actions, client due diligence procedures and so on – and the securities services industry is best advised to develop such standards itself before the regulators impose them.

There are commercial advantages to such an agreement. Without it, custodians can deal only with banks based in jurisdictions where KYC standards are

sufficiently robust, or be forced to invest heavily in further customer due diligence. However, banks should not regard KYC and customer due diligence as foreign imports. Banks do not lend to firms or individual they do not know or trust either.

Regulatory risk is another judgment that bankers have to make, and it is best made by ensuring that compliance is placed at the heart of the decision-making process, and becomes integral rather than external to the business. Custodian banks should also remind regulators of the fact that, although they prefer omnibus accounts, they make a considerable contribution to the maintenance of high standards by safekeeping US$120 trillion of assets.

Possible next steps for ISSA discussed at the Symposium

- The securities services industry should act before the regulators force it to act
- A study should be conducted into the contribution omnibus accounts make to operational efficiency
- The advantages and disadvantages of omnibus and beneficial owner accounts need to be studied by asset class and type of financial institution
- Formalization of the working group to devise best practices for the securities industry, drawing on work already done by the Wolfsberg Group and the Association of Global Custodians
- Draw up standards, technical tools and audit trail methods for a KYC utility
- Discuss with SWIFT a set of technical message standards to explore methods of transmitting beneficial owner identity information up the custody chain

A message from a regulator

Regulators are content that their formal programme is on course. It is the continuation of unacceptable conduct in the banking industry that is really frustrating them. Bad behaviour is now one of the most expensive risks that a bank can run, in terms of both explicit fines and reputational damage, yet regulators observe that banks are demonstrably failing to suppress the unacceptable behaviour that is brought so vividly to life when email chains and Bloomberg chats are published.

As a direct consequence of this failure, regulators are hitting banks harder with heavier fines. They take the view that, although heavy fines are not the most constructive way to proceed, even the most lavish fines imposed are not yet at a level where they seriously damage the capital strength and lending capacity of the major banks. Fines are therefore likely only to increase in size. Besides, even the regulators cannot control the financial penalties which are imposed as a result of criminal prosecutions.

A second response to unaltered behavioral patterns is to regulate activity in ever greater detail, as in the case of the regulatory reaction to the LIBOR scandal. There is now a growing risk of heavy regulation of all OTC markets, sharply reducing the profitability of their participants. Unless the banking industry stops “producing scandals" - which regulators now see as "the biggest unresolved issue in the industry” - supervisory intensity will increase.

Supervision, importantly, is not the same thing as regulation. It is the focus on rules of conduct and “supervisory intensity” that is aimed at altering the behaviour of banks and bankers. Explicit regulation is following a more predictable pattern, in which existing regulation is overhauled; previous unregulated sectors are brought within the purview of the regulators; and international regulatory bodies are increasingly influential, and aim to prevent regulatory arbitrage.

In Europe, for example, the European Union (EU) regulatory bodies are now dominant. The European Central Bank (ECB) has become the primary supervisory authority for 120 "significant" banks. The European Commission, in conjunction with the European Securities and Markets Authority (ESMA), has launched 25 different legislative initiatives including measures to protect retail investors (MiFID II); regulate swaps (EMIR) and increase bank capital (CRD). A European rule book is now being agreed.

Any expectations that over-regulation will be mitigated by a reliance on regulatory equivalence are likely to be disappointed. Regulators in the United States and the EU have developed extra-territorial ambitions which are now being imposed on banks that wish to trade in their markets. In any event, national regulation that does not aspire to international standards means near-uniformity is more the norm than equivalence.

In Switzerland, for example, where regulation remains principles- rather than rules-based, the export orientation of financial services means acceptance that Swiss banks can access foreign markets only if Swiss regulations match those of

the EU at least. This pressure ratchets up the Swiss regulatory burden. The country already matches international standards on capital and liquidity ratios, and its resolution regime for systemically important banks is more advanced than elsewhere.

For banks, this international regulatory convergence can be helpful. For a start, it reduces the scope for regulatory arbitrage, putting banks on a level competitive footing. Although global banks often complain that they are dealing with a great deal of local variation in the implementation of the G20 agenda, the degree of international convergence and uniformity is astonishingly high by comparison with, say, the implementation of the Basel II capital adequacy regime before the crisis.

The focus of all regulatory measures – financial stability – is equally unwavering. Regulators are aiming to increase the resilience of the global financial system by imposing tougher liquidity and capital ratios; singling out global systemically important financial institutions (G-SIFIs) for special treatment in terms of capital and liquidity; agreeing stable methods of resolving failed banks; bringing transparency to the OTC derivative markets; suppressing "shadow banking"; and changing remuneration practices at banks.

Not all of the consequences of these measures are desirable. The detailed information being collected on OTC derivatives, for example, is more of a business opportunity for data vendors than useful to regulators in enhancing financial stability. It is being done because OTC derivatives are held to have played a major role in precipitating the great financial crisis. Much of the detailed regulation now being implemented is of the same kind.

But if current regulations are a reaction to the previous crisis, regulators have certainly not lost sight of the possibility that the next crisis will come from a completely different and unexpected direction. Indeed, one of their primary concerns is that financial markets are still a long way from returning to normality. The financial crisis which began seven years ago is still, in the estimation of the regulators, continuing and far from resolved.

However, progress has been made. It is now widely accepted that large capital markets activities cannot be run on a thin capital cushion or with weak liquidity coverage. Although the equity ratio of most bank balance sheets - especially in the euro-zone - has considerable room to improve, the appetite for forcing banks to raise their equity capital to the same level as most large corporates is not high. The transition would be difficult, and the level of political acceptability is so low.

Conceptually, very high equity capital ratios raise two concerns. The first is that the financial crisis did not prove that the Basel II approach of adjusting capital ratios to risk models is always bound to fail. Secondly, there is a risk of excess. If an equity capital ratio is set at 20 per cent, a $1 trillion bank will need $200 billion of capital, when no bank has yet lost as much as $50 billion.

Lifting capital ratios that high would be difficult at a time when the return on equity being earned by banks is currently below their cost of equity. If equity capital requirements are raised, and the cost of debt financing does not fall, the

profitability of the industry would collapse. For banks to operate on a higher equity capital ratio, their structure and purpose would have to change radically, towards getting paid for maturity transformation only and charging, like other industries, for providing a service or a product.

Where regulators have made less progress is in agreeing a workable regime for resolving failed banks. The act that major banks live globally and die nationally is understood to be a serious problem, but it has proved difficult to design a globally acceptable solution to it. It is much harder to build an international consensus on bank resolution than bank capital, and even harder to implement, because an honest test of resolvability would see every bank fail, since no bank could fail safely today without State aid.

State aid has complicated the issue, because previous creditors to banks that have failed were rescued by taxpayers' money. That pattern needs to be reversed, with commercial creditors absorbing more of the costs of bank failure. The world awaits agreement on so-called Gone Concern Loss Absorbing Capacity (GLAC), a regime to determine which debts are bailed in, as opposed to bailed out. Once agreed, GLAC will have a huge impact on how banks fund themselves, since its ambition is to create banks that can fail safely without taxpayer support.

The banks that are active in the securities services industry are immune to none of these regulatory trends, and will bear their share of the costs. Nor is there any prospect of a pause while existing regulations are implemented. Custodians are best advised to take seriously the principal threat highlighted by recent regulatory fines – that their services, hidden behind "nests" of omnibus and beneficiary accounts – and propose solutions of their own, before solutions are imposed upon them by regulators.

Practical application of technology to solve regulatory challenges

Only market volatility is a more worrying issue than regulation for the senior management of the securities industry. Technology is a powerful tool in facilitating compliance with regulation, but its cost is larger than other demands – such as extra staff and external advice – and rising fast.

One estimate suggests that the industry will spend another US$50 billion on compliance by 2015, and that technology costs will rise at an annual compound rate of 6.9 per cent between 2014 and 2017. There is a further hidden cost in the loss of focus on new and existing business, but regulators believe the industry is profitable enough to bear such costs, which they see as lower than the cost of another major bank failure anyway.

For banks, the fear of regulatory fines and reputational damage means there is no alternative but to ensure they comply completely, and deliver data to regulators promptly. To use technology effectively to that end, firms have to manage technology and data across the siloes that traditionally divide businesses, functions and regions.

An estimated 80 per cent of data requirements are common across multiple regulations, but unless firms are able to manage their data across the entire enterprise, they will fail to meet their regulatory reporting obligations, struggle to comply with the new capital and liquidity ratios now being set, and be insufficiently flexible to adapt to local variations in the G20 re-regulatory agenda. Yet, at the same time, the technology budget has to support the growing appetite of staff and customers for secure mobile access to data.

Rapid access to high quality data is essential to meet regulatory as well as mobile demands, and it poses the severe practical challenge of integrating ageing technology platforms to improve data quality. Most banks have hundreds of separate technology systems and hundreds of different data sources. The systems process data adequately within a single system but struggle to achieve it across multiple systems, so the consolidated output is poor.

Fixing the problem is expensive. One projection suggests financial institutions will increase their data management spend from US$7.5 billion to US$8.9 billion in the 2014-15 financial year, but their expenditure on data analysis will rise even faster, from US$10.7 billion to US$12 billion.

Many banks are looking to third party vendors to avoid the difficulty of integrating ageing internal systems. In 2015, firms are expected to spend $1.4 billion with vendors that can help tackle aspects of compliance, such as data management, Know Your Client (KYC), anti-money laundering (AML), and the Foreign Account Tax Compliance Act (FATCA).

Banks are also making greater use of the Cloud, which is cheaper (especially in terms of maintenance) and scalable, especially by comparison with data warehouses, even when these are operated offshore. One estimate suggests the

value of the Cloud market for financial institutions will increase from $76.9 billion in 2010 to US$210 billion in 2016. However, there is evidence banks do not yet fully trust the Cloud.

However, banks should also be mindful of the changing nature of the technology that supports data management. Data entry and storage has in the past focused on using individual fields to store information. However, data systems now need to manage unstructured data, such as KYC information. Fortunately, new developments in optical character recognition (OCR) technology mean data can be extracted more quickly and accurately from physical documents, cutting the costs of automating unstructured data (an estimated 70 per cent of document scanning costs consist of labour).

New technologies also detect patterns in data more readily, though their effectiveness depends on real-time data aggregation. Improvements in data mining technologies means there are opportunities as well as costs in data aggregation. New techniques are already being used to good effect by other businesses, such as supermarkets, but banks are not adopting them on the same scale or in the same spirit.

Credit card companies are putting the technology to better use, notably in the use of pattern recognition software to detect fraudulent transactions. Banks are now recruiting their first data analysts of the requisite kind, but the supply of such people is short, and initially at least they may not understand the business well enough to ask the right questions.

Banks are not convinced that customers will pay for the intelligence they mine from the data they hold, so they are interested primarily in containing the cost. Banks also make money out of inefficiency, which accounts for part of their lack of enthusiasm for greater efficiency in data gathering and presentation. To maintain existing business, banks are also unable to jettison legacy systems, buy have to transition to new technology slowly. At the average bank, 60 per cent of technology expenditure goes on maintaining existing technology and, of the remaining 40 per cent, a fifth to a third is devoted to regulatory compliance.

Different permissioning is a further problem for banks, since Chinese Walls and differences in seniority or function mean different parts of the business and different people within each business are entitled to see different aspects of the data. Another challenge for banks is that the IT department tends to own the budget, and it is not always willing to spend it in ways that support the business.

With the regulatory environment changing constantly, and national regulators implementing global objectives in different ways, technology investment by banks is necessarily reactive rather than strategic. While banks recognise the need, it is hard for them to be strategic and agile at the same time. Regulation is also increasing the appetite of the securities industry for utilities.

Banks are looking to pool the costs of meeting regulatory demands where these confer no competitive advantage, of which KYC is the most obvious example. Working examples of utilities already in place include the SWIFT KYC Registry, the

Global Trade Repository built by the Depositary Trust and Clearing Corporation (DTCC) and the Client Reference Data Consortium (CReD) established by Barclays, BNY Mellon, Credit Suisse, Goldman Sachs, J.P. Morgan and State Street in conjunction with the DTCC as operator.

Its goal is to build a user-governed utility that provides a single trusted source of standardized data based on agreed rules to facilitate KYC, FATCA and Dodd Frank compliance. Although it cannot replace entirely what individual firms must do to comply, CReD will provide a common foundation that lowers the costs of compliance for individual banks, and provides a practical example of how banks can work together to devise information standards.

Regulators support utilities provided the data they possess is available to all members of the industry. In fact, the industry should be prepared to work with regulators to help them understand and analyze the vast quantities of information they are collecting as a result of recent regulation. Otherwise, there is a danger that regulators will mine the data ineptly, and draw the wrong conclusions from it in terms of policy prescriptions. Regulators should support this idea, since they are at risk of being blamed for failing to spot the next crisis in all the data they are assembling. However, regulators do tend to prefer data to be stored in their own jurisdiction.

Five functions were identified as susceptible to being serviced by a utility. The first was a securities trade repository, at least for certain data fields. The second was a repository combining information about both omnibus and beneficial owner accounts, with responsibility for moving beneficial owner data up or down the transaction chain for different purposes. A third was corporate actions data processing. A fourth was transfer agency. The fifth was the production of bench-marks, such as Libor, in order to manage the anticipated regulation of bank contributions to market-sensitive benchmarks of that kind. A sixth candidate for a utility is the generation and adoption of Legal Entity Identifiers (LEIs).

For the industry to support utilities, however, the banks that fund them need to be convinced of the savings they offer. The users also need to agree a set of principles governing how they are owned and managed, what business they will transact, whether the utility will be run for profit or on cost-plus basis, how resilient it can be made against external shocks, and where liability for errors, omissions and data quality resides. SWIFT, for example, does not take responsibility for KYC data quality. One reason the poor quality of corporate actions data has never been resolved is the fact that the liability remains with the issuers, while the benefits accrue to the custodians.

It is challenging to launch a utility – which, as the T2S project demonstrates, can take years to create - when regulatory deadlines are so short. In the case of CReD, for example, the banks took a lot of time to agree a governance structure. There is also a risk of fragmentation in utilities, with multiple providers failing to deliver a whole solution, as with derivatives trade repositories. Utilities can also change, and seek to demutualize, as the stock exchanges did.

Possible next steps for ISSA discussed at the Symposium

- Identify data sourcing and management challenges which can be solved by a utility
- Identify industry sectors where problems exist without scope for competitive differentiation (such as KYC)
- Establish best practices for efficient data management
- Devise a set of principles for the ownership, governance, resilience and liabilities of utilities
- Examine whether competing utilities are preferable to a single utility
- Educate regulators on meaningful sets of data for regulatory purposes

Infrastructural regulatory challenges (CPSS IOSCO Principles 14 and 19)

In April 2012 the Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO), published 24 principles for the management and operation of financial market infrastructures such as central securities depositories (CSDs) and central counterparty clearing houses (CCPs).[1]

Two of the principles - namely, Principle 14 on the need to segregate customer assets and collateral and make them portable to a new broker or bank in the case of counterparty default, and Principle 19 on the need to look through clients to the clients of clients – are proving particularly challenging for CSDs and CCPs around the world to meet, especially on an internationally consistent basis.

It is not hard to identify the origin of regulatory enthusiasm for segregation. The collapses of both Lehman Brothers and MF Global highlighted the risk of broker-dealers failing to distinguish between client assets and proprietary assets, and of failing to tag re-hypothecated assets through long chains of transactions. Both occasioned losses and, in the case of Lehman Brothers, a prolonged period of uncertainty.

Nevertheless, segregation poses a number of practical challenges. The number of accounts will increase exponentially, and so will the number of movements between them. While segregation is relatively easy to achieve in emerging markets (because volumes are low and systems are new) it is much harder to accomplish in developed markets (where volumes are high and legacy systems are installed).

A further difficulty is that segregation can drain liquidity from a market. It is easier to trade a market through omnibus accounts, not least because omnibus accounts facilitate stock lending. It is difficult to automate the lending of securities from segregated accounts. It is for this reason that the T2S settlement system being built by the European Central Bank (ECB) has elected to preserve omnibus accounts.

Similarly, the reform of OTC derivatives clearing in the United States under the Dodd Frank Act specifically retained the commingling of collateral for practical purposes through the concept of "legally separate but operationally commingled" (LSOC). Even in Europe, where the European Market Infrastructure Regulation (EMIR) obliges CCPs to offer segregated accounts and the regulator is often accused of having "gold-plated" the principle of segregation, forms of commingling are still permitted.

Segregation will reduce liquidity in the markets for collateral too. The fact that initial margin is trapped at CCPs, and cannot be mobilised as collateral, already presents the markets with an obstacle to liquidity. Moving collateral out of

[1] Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions, *Principles for financial market infrastructures*, April 2012.

segregated accounts will also hamper the ability of CSDs to move collateral quickly and conveniently across borders, although in some cases – such as the settlement by the Danish CSD (VP) of Danish krone transactions in T2S from 2018 – will require exactly that.

In any event, establishing the ownership of collateral is not easy across multiple legal jurisdictions. These can vary even within a single country. In the United States, for example, bankruptcy laws treat assets being bought and sold in cash transactions that are agreed but not yet settled as the property of the broker-dealer that intermediates the trade, while assets used to collateralise contracted but unsettled derivatives trades remain the property of the underlying customer. In Europe, by contrast, assets of "in flight" trades of this kind are always the property of the customer.

As it happens, most markets around the world meet the notions of segregation and portability in spirit if not always in practice. Practices range from compulsory segregation and portability, through voluntary segregation and limited portability and a choice of segregated or commingled, to partial segregation and partial portability, but the intent of protecting customer assets is clear in every case. Obliging markets at different levels of development, and with different levels of activity, to adhere to a single standard would probably be prohibitively expensive.

Similarly, it is easy to see why CPSS-IOSCO wants CSDs and CCPs to monitor and manage the risk introduced by the clients of the clearing brokers and custodian banks which act as gatekeepers to their services on behalf of buy-side institutions. The failure of a major buy-side institution could create difficulties for their clearing brokers and custodian banks, which are then unable to meet their obligations to others in the CCP or CSD.

Until now, clearing brokers and banks have operated on the principle that this risk is either adequately collateralised or non-existent, in the sense that CSDs never pay until they are paid. As a result, CCPs have not yet queried clearing brokers on the underlying clients which margin their positions through the clearing brokers. Nor have CSDs probed the clients of the custodian banks which settle trades through them by electronic book entry.

To make principle 19 effective, both CCPs and CSDs would have to monitor counterparty exposures in real time. Some CSDs and CCPs are already able to do this, but even they will be dependent on the ability of clearing brokers and custodians to do the same, and some cannot monitor exposures faster than overnight. There is therefore a mismatch between regulatory demands and the ability of the securities industry to fund it. Some clients may be jettisoned as a result. A KYC utility would probably help.

Possible next steps for ISSA discussed at the Symposium

- Develop standards or best practices for the treatment of “in flight” assets in cases of default
- Initiate a study of the advantages and disadvantages of segregated and commingled accounts
- Test the hypothesis that omnibus accounts add liquidity and segregated accounts subtract it
- Make recommendations on the orderly liquidation of collateral in an event of default
- Study the part a KYC utility could play in monitoring the risk introduced by indirect participants
- Lobby regulators on the need for CSDs and CCPs to get paid for implementing regulations

Collateral management

The need to manage collateral efficiently emerged before the financial crisis, since collateralised exposures attracted capital relief. Since the crisis, collateral management has become even more important because central banks lend only on a collateralised basis, the central counterparty clearing houses (CCPs) whose remit regulators have extended to OTC derivatives insist on collateral, and central bankers and regulators are implementing measures to contain the collateralized lending subsumed in the title of "shadow banking."

Despite the publication of a great deal of material on collateral and collateral management in recent years, including best practice advice from both the International Capital Market Association (ICMA) and the International Swaps and Derivatives Association (ISDA), not much of it was aimed directly at custodian banks and their buy-side clients: asset managers and asset owners. The ISSA paper on best practices in collateral management is the first to be aimed at these audiences.[1]

Certainly, custodians have found client use of collateral is growing rapidly, especially in Europe but also in Asia. SWIFT reported usage of its collateral messaging was up by a fifth last year. This reflects regulatory pressures, of which centralised clearing of OTC derivatives is the most obvious, but demand for collateral management services has not grown as rapidly as anticipated two years ago.

Reasons for that include the fact that the expected collateral shortage did not materialise, banks are de-leveraging, higher capital and liquidity ratios are suppressing hedge fund borrowing, broker-dealers are downsizing their fixed income businesses, collateral-hungry activities are not fully developed yet, derivatives markets use cash only as collateral, and fiscal deficits obviate shortages of general collateral.

The buy-side is still unfamiliar with the concept of third party collateral management too. Though it may become critical for them once centralized clearing of OTC derivatives begins, they are leaving the potential solution to the problem untouched until the need is indeed critical, as central bank funding is withdrawn and centralized clearing through CCPs takes off.

This lack of preparedness makes it difficult to decide what collateral management services need to be developed for the buy-side. The buy-side appetite to optimise collateral is increasing slowly. But the scope to help the buy-side "transform" its collateral through the securities financing markets into assets eligible for CCPs and central banks is exaggerated, chiefly because it is too expensive an option for the buy-side to purchase.

Once demand for collateral does pick up, the lack of infrastructural links to facilitate the genuine cross-border movement of collateral between banks, central

[1] ISSA Working Group, *Best practices of collateral management for cleared and bi-laterally traded products*, March 2014.

banks and the buy-side will become problematic. At present, cross-border settlement costs outweigh the benefits of more efficient management of collateral. CSDs could play a larger role in making collateral available, and moving it across borders efficiently, and in monitoring the risks of such movements.

The local custodians that act as gatekeepers to the CSDs for the most part have no collateral monitoring and management capabilities at all. Cross-border collateralisation will struggle to take off unless they develop them. Other problems inhibiting cross-border movement of collateral include conflicts of law between jurisdictions, and differences between CCPs in their margin calculation methodologies.

Regulatory enthusiasm for segregation of collateral will not assist efficient collateral management either, because it demands asset owners give express approval to the use of their assets as collateral, and creates scope for bespoke lists of eligible collateral. However, there is a view that the friction created by collateral segregation might actually boost collateral transaction volumes overall.

Yet unless collateral managers can at all times identify the underlying beneficial owner of a piece of collateral, neither clients nor regulators will allow the business to develop. Buy-side clients and corporates – which are a new client segment - have to make informed decisions about the third party collateral management services they are being offered. They will not buy the services unless they understand the benefits and are confident the risks are being managed.

Possible next steps for ISSA discussed at the Symposium

- Circulate the collateral management working group paper within member institutions
- Distribute the working group paper to investment management and corporate clients of members
- Initiate a study of jurisdictional conflicts that inhibit the movement of collateral across borders
- Assess how CSDs and CCPs measure up against the best practices in the working group paper
- Study how margin calculation methodologies can be standardized
- Collate the default management methodologies of the CCPs
- Depict the collateral flows in a flow diagram

Out of network assets

Custodians have struggled in recent years to keep up with the range of asset classes acquired by their buy-side clients. Today, they are expected to settle, safekeep and service not only cash, equities, bonds and futures and options, but also holdings in funds and funds of funds, private equity funds, real estate, bank loans, precious metals, fine art and wines, a variety of OTC derivative structures, and collateralized interests of various kinds.

Various factors are increasing the popularity of unusual asset classes. One is the search for value and return at a time when monetary policy is suppressing the natural rate of interest while inflating the value of other assets. Another is the willingness of central banks to finance virtually any assets banks possess. The Banque de France, for example, is willing to take bank loans as collateral for financing.

However, custodians tend not to control these assets in the sense of keeping them in custody within their own network of sub-custodian banks. This presents them with the risk of assuming liability without taking control. They can manage this to some extent by operating to a "negligence" rather than strict liability standard, but that does not insulate a custodian from the risk of being sued anyway. This is a particular problem for custodians offering depositary services under the Alternative Investment Fund Managers Directive (AIFMD) in Europe.

Besides, so-called "out of network" assets are operationally complex. There is no standard method of capturing and routing orders for settlement. They cannot be held in a central securities depository (CSD), and so never settle by delivery against payment, making it difficult to confirm transfer of title. They are harder and costlier to value and report to managers, investors and regulators, because they often require specialist valuation and warehousing agents. "Out of network assets" require a lot of manual processing.

What infrastructure is available, such as the Loan/SERV service offered by the Depositary Trust and Clearing Corporation (DTCC) for the syndicated loan market, tends to be patchy and fragmented by comparison with the securities markets. In practice, for example, most bank loans are still traded by e-mail. Similarly, OTC derivative transactions are settled and serviced by fund administrators through commercial matching and confirmation services, but reported to multiple trade repositories by clearing brokers.

The principal obstacle to improvement of the infrastructure is that, although the volume and value of "out of network" assets is rising, and so are the costs and risk of supporting them, the problems are not yet large enough to force market participants to insist on meaningful reform. Even the patchy and fragmented services that do exist are under-used and lack sufficient scale, because they are poorly marketed, cannot overcome inertia, or find their progress blocked by vested interests.

An obvious way forward is for more out of network assets to be held and settled in CSDs. A large part of the purpose of the paper published in April 2014 by ISSA in

conjunction with the Association of Global Custodians was to encourage custodians and CSDs to discuss how they can work together to address the challenge of verifying and transferring the ownership of assets that cannot be held within a conventional custody network. [1]

Funds are an obvious starting point. There are order-routing service providers in existence, which link fund distributors and fund managers or their transfer agents, which effectively perform the custodial role by maintaining a register of investors and their holdings. Mutual fund transactions already settle in CSDs in France, Germany and Luxembourg, and T2S aims to extend that practice throughout the euro-zone, by settling mutual funds in central bank money at the European Central Bank.

Other asset classes are less susceptible to inclusion with a CSD, though the DTCC is proving it can service bank loans, and the CSD in China is working with private equity managers. Nor are CSDs for "out of network" assets a complete solution to the risk faced by custodian banks. They will operate accounts on behalf of clients that own the assets, but will still not actually hold the assets in direct custody, or even be responsible for their valuation by fund accountants. It might be wiser to shift the focus from more efficient servicing of "out of network" assets to bringing assets within the network.

A further issue that needs to be addressed in processing and safekeeping of "out of network" transactions and asset classes is multiple legal jurisdictions, which increase legal risk and uncertainty. Regulatory pressure on custodians to assume liability for the safety of "out of network" assets has run ahead not only of industry practice, but also of securities law. It was for this reason that ISSA published two years ago a first report on "out of network" assets,[2] and has in the new paper with the AGC included a list of legal references.

Possible next steps for ISSA discussed at the Symposium

- Take the "out of network" assets paper to the next level, with recommend-dations
- Encourage members to formally commit to the recommendations
- Draw up best practice recommendations for due diligence on mutual fund transfer agents
- Document the criteria which makes an asset eligible for inclusion in a custody network

[1] ISSA and AGC, Joint Report on *Addressing Challenges in Safekeeping and Supervisory Services for Out-of-Network Assets*, April 2014.

[2] ISSA, *Hidden Risks in the Securities Services Industry – A Sampling of Consequences to Custodians, Clearers and (I)CSDs*, June 2012.