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Nobody listens to techno

It's safe to say that techno beats aren't to everyone's taste. They typically involve loud, nondescript sounds, rhythms too fast to realistically dance to, and shouting that obscures any kind of discernable melody. In my experience they are often accompanied by a sticky dance floor, a drink too sugary and decibels that don't allow for easy conversation. I'd rather a glass of wine and a big band, any day.

In financial services, it's harder to remain a traditionalist, and the consequences of doing so can be far worse than damaged street cred. The volume of start-ups can be a little overwhelming, and the market packed with strangers. In such a crowd of outsourcing solutions, new initiatives and even brand new currencies, there is pressure to make the right choices and the right partnerships.

However, chaos must subside. As with so many culture changes, once you get in to the groove things start to seem more accessible, and that's where our industry is at the minute.

With the launch of T2S, first-wave CSDs have completed massive tech upgrade projects. Service providers now reside in 'the cloud'. There are those out there equipped to advise on this new breed of cyber money, and more and more mergers mean a less saturated pool of outsourcers to choose from. In this issue you'll find regional success stories, advice on how to manoeuvre in a world of digital currency, and a look at how far collateral management has come.

The world inevitably evolves, but, in popular music as in life, trends are cyclical. All you have to do is tame the techno-noise, and before long it will turn in to a waltz.

As ever, we appreciate any feedback, and if you see me around the conference, do come and say hello. Mine's a glass of red.

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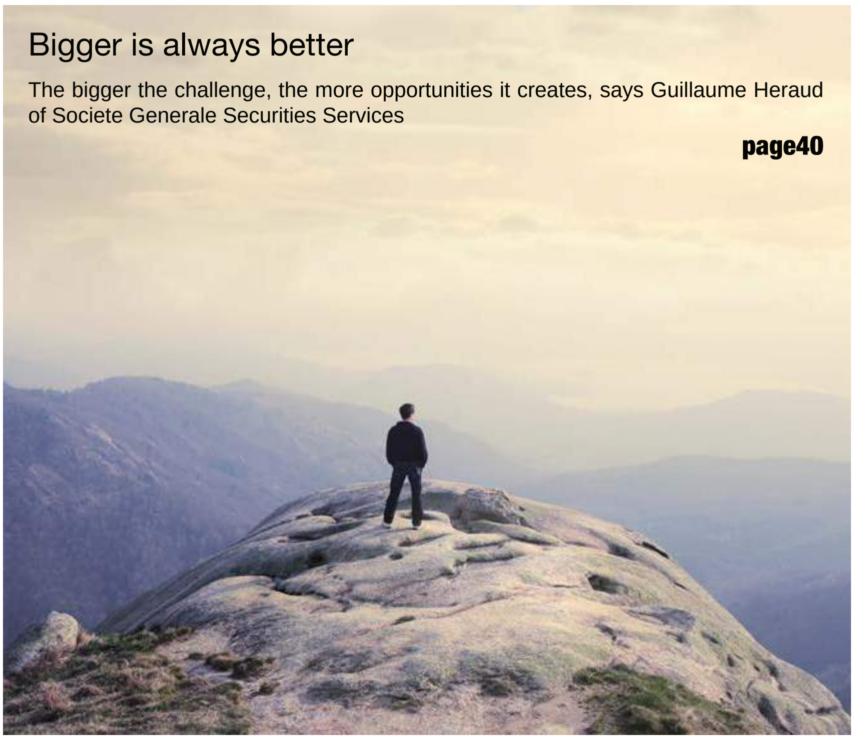

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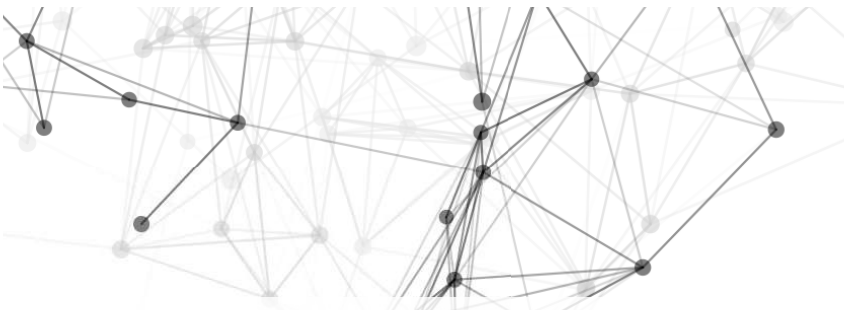


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Techno nonsense

The last few months in financial technology have seen milestones crossed and new solutions launched, but M&As have dominated the headlines

STEPHANIE PALMER REPORTS

Societe Generale Securities Services (SGSS) launched its fund distribution hub in Luxembourg, to support asset management companies seeking to distribute UCITS and alternative investment funds internationally.

The centre will support asset managers through an international team that works with local representative agent support services for fund distribution in 14 countries. It is designed to help with the complexities of entering international markets and can manage fund registration processes regarding local regulatory authorities on behalf of asset management firms.

Similarly, **HSBC** has introduced its FASTrak solution, a one-stop automated tool to minimise market entry challenges for foreign investors in India. The solution comes as a response to feedback from foreign portfolio investors (FPI), who cited documentation-related challenges, procedural issues and time-consuming registration processes as key barriers to investing in India.

The process takes an average of one month, however, the tool speeds this up by quickly identifying and storing key documentation, allowing investors to categorise themselves in line with FPI requirements. They can then complete the documentations, complete with validation checks, assessments and storage.

Managed data service provider **RIMES** added 20 new data sources to its portfolio in the first six months of 2015, as a response to demand from asset managers and owners, and an increased reliance on data.

Alessandro Ferrari, global head of marketing at RIMES, said: “No two firms use the same data. Last year, around half of the data we managed on RIMES on behalf of our customers had some element of customisation. We believe we will exceed that figure this year.”

Brown Brothers Harriman’s (BBH) Infomediary messaging engine has surpassed a million automated fund orders in Asia.

It offers data translation, transformation and transmission services, and aims to shorten the straight-through processing (STP) lifecycle from a matter of hours to minutes. It has now processed 1.3 million fund orders across 25 fund ranges through the Taiwan Depository & Clearing Corporation’s offshore fund platform.

Since its launch three years ago, BBH Infomediary has played a part in improving STP rates in Taiwan from 10 percent to almost 70 percent.

It is designed to reduce trading and operational risk and to provide faster access to order status information, and could also increase investment opportunities for BBH clients and other market participants.

Partnerships

Volante Technologies has paired up with start-up financial technology firm **IWIAfrica** to help it integrate further with financial markets.

IWIAfrica, a SWIFT Innotribe finalist, is designed to help businesses perform cashless transactions with customers using mobile devices, personal computers and points-of-sale. It uses a range of payment methods including digital wallets, banking services, cards and digital currencies. Volante will manage the financial messaging and data integration aspects of the platform, allowing IWIAfrica to focus on the customer-facing mobile integration platform and commercial opportunities.

The partnership is intended to support enabling a digital securities trading exchange with ambitions to expand across Africa, and to enable smooth trading of securities using personal technology.

Mick Fennell, general manager for the Middle East and Africa at Volante, commented: “The global financial services market is ridden with

both domestic and international standards, and all too often early-stage firms struggle to support the complexity of message standards adoption, let alone manage the myriad message changes and updates that continually occur."

Bloomberg STP Solutions and **Traiana** are partnering up to develop a solution for foreign exchange (FX) options post-trade processing.

Bloomberg is a cross-asset post-trade processing provider, while Traiana provides pre-trade risk and post-trade processing solutions.

Together they will develop an STP infrastructure to further streamline the workflow of FX options.

The pair will use existing infrastructure to make the solution as cost-effective as possible, allowing the infrastructure to accommodate a variety of existing market workflows around affirmations and allocations.

Ben Macdonald, global head of product at Bloomberg, said: "As the FX market reaches greater levels of automation, FX options, with their complex instrument structures and numerous post-execution events, continue to involve manual processes which present operational risks and challenges to market participants."

He added: "We believe that providing a decentralised solution to both buy- and sell-side participants offers them the flexibility needed for broad market coverage and a greater level of participation."

EBS Direct has gained additional liquidity providers for its EBS BrokerTec electronic FX and fixed income business, recruiting **Metallinvest and Standard Bank.**

Metallinvest will be the first Russian liquidity provider and Standard Bank will be the first South African provider, bringing the total number of providers to 24, and expanding the portfolio to include local market providers for the first time.

EBS Direct liquidity providers can offer their customers access to a liquidity pool that includes major and emerging market currencies, increasing liquidity and improving pricing, while also increasing certainty of execution. The service offers 86 currency pairs including spot foreign exchange, non-deliverable forwards and precious metals. It has seen a steep increase in daily volumes in the last year, from about $5 billion in April 2014 to $17 billion in May 2015.

Acquisitions

Banking and payment technology provider **FIS** signed an agreement to acquire **SunGard** for a value of $9.1 billion, including the assumption of SunGard debt.

SunGard sees annual revenues of about $2.8 billion, and the companies anticipate combined annual revenues exceeding $9.2 billion.

As a result of the acquisition, FIS will be able to offer a broader range of banking and capital markets solutions for supporting financial institutions around the world.

SunGard's service offerings include hosted and on-premise deployments, and both companies' services extend to retail and corporate banking, payments, risk management, asset solutions and insurance.

Gary Norcross, president and CEO of FIS, said: "By bringing together two innovative companies with common business models, similar cultures, strong leadership and complementary solutions, we are enhancing our ability to empower our clients and deepen client relationships through an expanded full-service offering."

Russ Fradin, president and CEO of SunGard, added: "Our focus has always been on delivering more value to our clients and making decisions that achieve our growth and performance objectives."

"We are proud to become part of one of the financial services industry's most respected and solidly performing companies. We embrace this transaction and believe it is the best outcome for our employees and the clients we are dedicated to serving."

Subject to regulatory approvals and customary closing conditions, the transaction is expected to be finalised in Q4 2015.

Sustainalytics announced it is acquiring **ESG Analytics**, a provider of web-based solutions to assist asset managers in analysing and managing their environmental, social and governance (ESG) risks and opportunities.

Zurich-based ESG Analytics uses proprietary methodology to evaluate metrics. By collecting and analysing ESG data on a portfolio, the firm helps investment managers, pension funds, and players in the private equity space with analysis and reporting.

Sustainalytics CEO Michael Jantzi commented: "[We are] committed to innovation through new products and leveraging technology to enhance the value we provide to clients across a spectrum of risk identification and mitigation solutions."

SS&C acquired **Varden Technologies**, a Boston-based communication solutions provider for investment firms, with a client and investor suite that connects print, online and wireless communications.

Varden serves more than 100 mutual fund, wealth management and fund administration clients with assets under management ranging from $50 million to $300 billion.

Perry Harris, president of Varden Technologies, said: "Combining Varden with SS&C enables us to significantly enhance the scale and power of our platform, and continue to work with our clients to lead the innovation of client reporting and communications."

SS&C also finalised its acquisition of investment management software provider **Advent Software**, which serves more than 4,300 customers including asset managers, hedge funds, fund administrators and prime brokers.

Mandates

Chrysalis Financial has mandated SS&C's Precision LM cloud-based commercial loan management suite, as it looks to extend its lending platform.

Chrysalis manages all stages of the lending process, and the partnership aims to improve transparency and increase levels of automation as the lending platform grows.

Chad Keller, chief of bank operations at Chrysalis, said: "With SS&C's Precision LM, we will be able to accelerate productivity through a best-in-class user experience, greater automation and speed, enhanced transparency, and improved control and security."

Emerald Advisors has implemented **INDATA's** iPM Cloud technology for its newly acquired boutique firm Elessar Investment Management.

iPM Cloud is designed to offer the same security benefits as a hosted environment in a flexible software-as-a-service model.

Clients occupy a private environment with physical hardware security and infrastructure built in, while data can be accessed from anywhere.

Financial services technology provider **Lanware** has been appointed as the sole provider of outsourced technology services for the UK and Ireland business of **Mitsui Sumitomo Insurance at Lloyd's (MSIG)**.

The four-year contract follows a benchmarking exercise by an independent research organisation, and reflects Lanware's previous support of the firm, and its services specifically designed to support MSIG's business plan.

Lanware will also work on the next generation of outsourced infrastructure, with a focus on cost optimisation, and take over functions including infrastructure, networks and disaster recovery. The intention is to prioritise cyber security, taking a proactive approach to security systems.

Nippon Wealth Bank has chosen **Wolters Kluwer Financial Services's** OneSumX solution for its Hong Kong operations.

The bank will use the solution for its anti-money laundering and regulatory reporting obligations. Based in Hong Kong, the bank focuses its business in Asia and Japan.

The OneSumX suite creates a connection between governance, finance, risk and compliance, and is designed to provide firms with real-time risk monitoring while addressing threats as they arise, as efficiently as possible.

Oh, Canada

Financial services players are placing greater focus on asset safety. CIBC Mellon's Lou Lesnika explains Canada's experience in guarding its securities

MARK DUGDALE REPORTS

Asset safety is a fundamental requirement for asset owners. What should they be seeking in an asset servicing provider?

Asset owners and managers should expect their custodians to adhere to high standards, with robust reconciliation procedures, audit reviews supporting recordkeeping and reporting, and well-defined controls in place to support the safety and security of assets held in custody. For example, CIBC Mellon staff members perform a daily reconciliation of holdings at the Canadian Depository for Securities (CDS) versus our custody platform, which supports our ability to accurately reconcile cash and security information between our custody system and the sub-custodians and depositories. We also work under the oversight of our external auditors to conduct counts of physical and depository positions, and hold client assets in a separate customer unit identifier at CDS.

How much pressure are clients under to understand central depositories?

Clients are looking for assurance that risks are well managed and that the appropriate steps have been taken to keep their diverse asset classes well protected, in both physical and book-based environments. They are looking for the transparent information they need in order to maintain a clear view of their account activities and to support the governance and risk management reporting that stakeholders are now asking them to provide.

They are also expecting to be able to tap in to a user-friendly online information delivery platform at any time, in order to access reports, transactions and reference materials.

To assist them with staying well informed, clients are also looking to their custodians to distill complex settlement and account details, giving them the information they need to have confidence in the protection of their holdings.

How do central depositories and custodians work together?

Central depositories often have committees focused on the assessment and implementation of changes relating to trade matching and reporting procedures, and that is a great way to suggest changes and to stay well informed. Clients expect their asset servicing providers to work closely with central depositories, for example, by actively reviewing proposed changes, working to minimise impacts and disruptions, and proactively keeping clients informed of updates.

At CIBC Mellon, our relationship with CDS goes beyond trade settlements. We actively collaborate on developing industry standards and on introducing operational efficiencies in the capital markets that support clients' investment servicing needs.

Are there major changes on the horizon for custodians?

One of the market changes we are seeing is the adoption of shorter settlement cycles in various jurisdictions. Following the implementation of T+2 in European markets last year, US market authorities intend to move from T+3 to T+2 by Q3 2017. Since Canada is closely aligned to the US market, market authorities here are looking to follow suit with the same targets. Europe's new Alternative Investment Fund Managers Directive reporting requirements are also colouring global market participant interest in understanding the workings of various markets, including Canada. AST

Lou Lesnika
Assistant vice president of trade settlements
CIBC Mellon

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Blood, sweat and T2S

The first wave of T2S is finally up and running, and it's been a long time coming. But the early adopters aren't putting their feet up just yet

STEPHANIE PALMER REPORTS

After what has felt like a lifetime of anticipation, the grand event that was the go-live for the first wave of Target2-Securities (T2S) was arguably something of an anti-climax, with no mishaps or malfunctions, or any major events of any kind.

As planned, Europe watched on 22 June as the central securities depositories (CSDs) of Greece, Romania, Malta and Switzerland flipped the metaphorical switch and migrated to a world of harmonised settlement on delivery-versus-payment.

And rather remarkably, nothing went very wrong. This is, of course, excluding the late-running of Italy's CSD, Monte Titoli, which joined the party on 31 August, instead. A cynic could say that without the Italian market in play, the

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WHERE: NSD stand E38 (Level B2)

volumes the first four CSDs contributed to the T2S platform were so low, there was hardly an opportunity for any errors. Indeed, Italy's contribution is significant: it was estimated that of the first-wave countries, the Italian market would account for up to 98 percent of trades on T2S. But so far at least, that hasn't been problematic. By all accounts, things are running very smoothly.

Of course, CSDs and participating custodians have been gearing up to this monumental change of culture for literally years. They've put the technology in place to manage the connectivity aspects—technology that has come about because they've seen the commercial benefits of investing in T2S, and convinced their clients to see it, too.

Cristina Belotti, head of product development for financial institutions and brokers at Societe Generale Securities Services (SGSS) in Italy, explains that the design of the SGSS T2S solution was launched internally in 2011. Belotti and her team began a long journey of explaining what exactly T2S would mean for clients' businesses, and what the real impacts would be, both in the short and long term, and what benefits it would potentially bring with it.

She says: "We had to do a lot of education, explaining the steps, the functionalities, and the impacts beyond just the technical matters. Very few at that time were already aware of T2S and what was happening, so they were not able to perform an internal analysis autonomously."

"We not only developed the new functionalities, but we also set up services to allow clients to use those functionalities to optimise and expand their business. We met with each and every client, explaining the process and evaluating how much they could change the setup of their service model."

"We are still holding web seminars with clients, keeping them informed and making sure they're comfortable with the new processes we're putting in place."

Invested interests

Many of the early adopters share the opinion that an investment in technology is the best way to make the most of T2S, and unsurprisingly most of these are also convinced that connecting to this first wave brings with it the best business opportunities.

Alexandre De Schaetzen, director of product management at Euroclear, points out that it is important to acknowledge the difference between business connectivity, or that technology used to access and effectively operate in the participating markets, and the technical connectivity that allows the connection in the first place.

He says: "In regards to business connectivity, there are opportunities to maximise T2S investments. For example, leveraging a single infrastructure to access multiple markets will unlock economies of scale."

"Applying harmonised processing standards across markets will also reduce costs and take away existing complexity. In today's economic environment, it is important to control expenditure, and a good and flexible way to do this would be by re-using the same connectivity infrastructure, where one provider is used to access different markets, regardless of the access models."

When it comes down to purely technical connectivity, the level of investment required depends on whether an institution is a directly connected participant (DCP) or an indirectly connected participant (ICP). The indirect kind does not necessarily have to make the big initial investments, as it can continue using its existing connection with a CSD.

De Schaetzen adds, however: "Some CSDs might decide to take the opportunity of T2S to move away from proprietary messaging to the benefit of universally accepted ISO messaging formats."

DCPs could face significant costs from the offset, and may find themselves having to make some tough decisions.

De Schaetzen says: "The size of investment depends on what technology financial institutions already have today. DCPs will need to choose between SWIFT or CIA Colt technology as the gateway to communicate directly with T2S, and both have price tags."

Diana Chan, CEO of Euro CCP, also highlights the changes to communications technology, but

focuses on the ISO standards. She says: “Firms supporting T2S had to implement, in one way or another, the ISO 20022 message format.”

“Some may have implanted a ‘bulking’ mechanism to group messages into a large file and send just the large file to reduce communication costs. Those that access T2S via a graphical user interface had to implement the network connection and the authentication mechanisms to enable access.”

But this is just a short-term solution, and with T2S rolling out across 21 countries over the next two years, a long-term coping strategy will be necessary in the end.

“Firms will implement changes to fully use the T2S functionalities, and upgrade their infrastructure to cope with the heavier traffic when more CSDs migrate to T2S,” says Chan.

Although it’s been on the agenda for a long time, the T2S platform itself is still very much in its infancy, and while many tech teams are planning for a future with more connections, higher volumes and trades with countries further afield, it’s difficult to predict what a five-year-old T2S might look like. With any project, it is wise to plan for unexpected glitches, and with something of this magnitude, it’s perhaps sensible to assume that, really, anything could happen.

Like many others, Isabelle Olivier, T2S programme director at SWIFT, believes that the main priority should be flexibility and adaptability—finding ways to turn T2S functionalities in to benefits for clients, whatever they may be. Ultimately, she says, there is a lot more to it than being prepared for the technological aspects.

“Institutions should implement open and flexible solutions to be able to migrate on time—and this should be a top priority for all participants,” says Olivier.

“They can then enlarge their clients’ offerings by smoothly implementing the new functionalities offered by T2S to turn these in to competitive advantages and appealing offers for clients.”

“Technology will play a key role in this game, but it needs to be combined with the right marketing and the right commercial approach.”

Business is better

Avi Ghosh, who is head of marketing and communications at SIX Securities Services, suggests that too many firms are still focusing on connectivity, when actually they should be exploring the business opportunities that T2S opens up to them.

“The challenge of T2S is far more than just plugging in and, although T2S should bring down costs in the long-term, it is not just about cost-savings, certainly not in the initial stages of implementation,” he says.

“Rather, T2S represents the possibility for us to help our clients achieve their pan-European ambitions, particularly in areas such as collateral management and asset servicing in the short to medium term. Long term, this new environment will likely lead to significant consolidation in the industry, and then on to long-touted cost reductions.”

The key theme here is long-term investment. SGSS has been preparing for the first implementation for four years, and between now and 2017, further waves will join, bringing more volume and inevitably more complications. On top of this, with the world of both financial technology and regulation moving almost too fast to keep track of, for many, the most important thing is to develop technology that can adapt to a future that is almost impossible to predict. A feat that requires investment in order to reduce costs later.

Belotti says that SGSS is now working on the technology to ensure that makets joining T2S in later waves can be added smoothly to the solution, bearing in mind that the current technology and processes must be adaptable. She adds, however, that while T2S brings more harmonisation, jurisdictions will retain specificities, and each will still require a tailored service.

She says: “There will be a lot of investment in optimising our service model, and it will not stop at SGSS in Italy after the migration of just the one domestic Italian market.”

"As the later-wave CSDs migrate, SGSS will continue investing in new developments, adapting to the specifics of each market. It will be an ongoing investment month-by-month and wave-by-wave, and there will be new releases on the platform to which we will need to adapt."

"We cannot know today, for example, exactly how the Spanish market will migrate to T2S," she adds. "Or what will remain specific to each market and what will be harmonised. The development and the investment we did was tailored to a standardised process, while retaining flexibility considering that we will need to adapt later on."

In theory, those joining in later waves should be able to connect much faster and more smoothly. But, by missing out on the opportunity to be an innovative front runner, those in the second, third, or fourth waves could miss out on new business, costing them in the long run.

Industry opinion varies on this point. Predictably, those that committed to the first wave stick with the conviction that their boldness will pay off, while those bringing up the rear defend the 'wait-and-see' approach.

Chan believes that those joining in the later waves may be at a slight disadvantage, as those that are connected now can get started on providing additional services, while the later ones are still focusing on the migration.

She says: "The first wave CSDs can devote time and resources to offer 'investor CSD' services to their existing clients, and to clients of the CSDs that migrate in later waves."

Ghosh highlights the benefit of the extra experience and road testing that first wavers enjoy, suggesting that their clients will benefit from testing their processes while T2S is still in its early stages.

"By the time the second and third waves of CSDs go live, the first wave CSDs—especially those which have significant cross-border volume—will already have tested and pushed the platform to its limit," he says. "This means having a head start on being able to provide valuable insights and advice for clients on how best to work in this new environment."

On the other side of the argument, De Schaetzen says: "I do not believe that early joiners to T2S will be in a more advantageous position."

He points out that this staggered approach is all part of the plan, implemented for good reason. The main intended benefit of the platform—harmonisation of EU jurisdictions—won't be fully visible until all 21 participating countries are connected.

"Only when a critical mass of securities settlement volume is in T2S—after waves three or four—will the full benefits of T2S be realised."

"Hence, in my opinion, there are no specific advantages of being in the first wave, other than completing a migration is nice to have behind you, if it has been a success. The advantage from an IT investment roadmap point of view is to have it 'done' quicker, allowing to focus resources and time on developing new added-value services to clients."

Both Olivier and Belotti are also of the opinion that the differences are minimal. Olivier says: "Like in every project, there are advantages and disadvantages."

Olivier specifies: "Being in the first wave offers competitive advantages. Those CSDs will be the first ones to get the advantages and they have a chance to capture new clients that are looking to be early adopters. But, at the same time, it also means being the guinea pig and they will probably suffer a bit more in the project implementation phase."

Belotti is of the opinion that although there are differences, in balance the gap is minimal. Those joining in the first wave had a chance to demonstrate their capabilities and their knowhow, and "they are potentially in the best position to win new business first".

But she also says: "There are advantages to being the followers."

"They can count on some lessons learnt, and they're already taking less risk, joining a platform that is already stabilised and already tested. And less risk equals less cost."

Ghosh concedes that "in some senses, the wave two and three CSDs stand to benefit from the gruelling test schedules wave one CSDs have set, as well as the comprehensive and detailed feedback provided to the European Central Bank (ECB)".

He adds: "It is safe to say that this is a complex piece of infrastructural upgrade."

Next up

Whoever stands to benefit the most, it is clear that the challenges of T2S are not over yet. As well as developing new services and ensuring adaptable technology, there is still what Olivier calls "the next milestone"—the next waves of migration and the implementation of new links with the CSDs.

While Chan agrees that there will no doubt be more challenges to come, she stays strong in her conviction that every hurdle will be worthwhile, in the end.

"Some issues could surface once large-volume CSDs join. This may affect the settlement batch times and settlement liquidity efficiency. Market participants have not experienced the behaviour of the T2S platform under higher and actual load during an entire business day," she says.

"But after the teething problems have been resolved they quickly become distant memories; everyone will be enjoying the new system and no one could imagine how they would manage without it."

With a similarly positive outlook, De Schaetzen also accepts that "the challenges faced by CSDs in joining T2S, are not restricted to only the first wave".

He adds, however: "Many stakeholders and the ECB have cooperated well to manage this huge project, which is fundamentally redrawing a continent's entire capital market infrastructure."

As an inter-European project, T2S is a forward thinking one, and there is a feeling that the rest of the world is watching. It's an opportunity for new connections and services, and, when it comes to business opportunity, many are viewing it as make-or-break time.

"There is a feeling that the rest of the world is watching. It's an opportunity for new connections and services, and, when it comes to business opportunity, many are viewing it as make-or-break time"

Belotti concludes: "Now is the right time for thinking about what will change in the future, thanks to T2S. Clients are choosing now whether to leverage the advantages, or not."

As with so many changes and adventures, it's all about being properly prepared. Despite all the planning and investment—of time, money and energy—that has gone in to this project already, it's still not time for complacency. T2S has plenty more to do before it grows in to its boots, but at least there's a consensus that it will be worth the work, in the end. **AST**

In a tech rich world

Money makes the world go round and digital currencies are the latest iteration. Experts give their opinions on whether investors should get caught up in the spin

BECKY BUTCHER REPORTS

Should asset owners take advantage of digital currencies such as bitcoins, and what should they do to avoid any of the potential pitfalls?

The use of digital currencies is on the rise, and investors need to be able to trade in them in a more efficient and organised manner than before, while avoiding unnecessary risk.

> "It is likely that we are only at the beginning of strong growth within this segment"

However, in my view, the technology underlying digital currencies is even more interesting. This is becoming one of the hottest topics in the world of finance. In the last year alone, we have seen an increasing number of initiatives exploring block chain technology and how it can be utilised in different areas. I am fully convinced that the tech company that will one day become the new Google or Facebook is to be found within block chain technology.

What makes crypto handling a stroke of genius is the fully decentralised model where information is available to all. The new technologies are clearly capable of challenging traditional banking systems through strongly decentralised service systems. Transfers take place at lightning speed, and these services especially open up major opportunities for large groups of people around the world who cannot afford current banking fees.

It is likely that we are only at the beginning of strong growth within this segment. Players within the traditional financial sector are also beginning to understand this and they are now making investments in bringing block chains into their operations.

Nils-Robert Persson
Chairman
Cinnober Financial Technology

The question itself presupposes that other asset classes don't have downsides, which is clearly not the case.

If you look at recent events on the China stock market or even in Greece as their stock market opens after five weeks of closure, all investments hold risk if the intention is somehow to realise a profit when you inevitably exit to fiat currency.

The bitcoin is somewhat different, however, because it is the exit strategy.

To understand this, think of what email brought us—free letters, sent person to person, without a middleman, instantly across the world—and apply that to money, then you begin to understand the bitcoin. Fiat currency and traditional banking are like hand-written letters, completely unnecessary when email came along.

At the Belgian Bitcoin Association, and as an individual, I never advise anyone to invest in bitcoins. That is not the purpose of bitcoins, and should never be considered as such.

> "Bitcoins are like owning a domain name such as cocacola.com back when nobody had heard of the internet"

Personally, I own a part of a payment network and a currency that will change the way we send money. It's like owning a domain name such as cocacola.com back when nobody had heard of the internet. If bitcoins succeed, then I won't need euro, dollars or sterling anymore, and that's my exit strategy.

Chris D'Costa
Founding director and secretary
Belgian Bitcoin Association

Holding digital currencies like bitcoins can seem to some an exercise in risk management. In reality, 'holding' bitcoins really means knowing the private key—a long, complex password—required to spend them.

In this, there are two schools of thought: care for the key yourself or let someone else care for it. Caring for the key yourself means using local bitcoin wallet software, using a dedicated hardware device designed to store keys safely, or using a so-called 'paper' wallet, which is really just the key written on a piece of paper and locked away.

> "Look for those with sophisticated risk-management programmes, anti-money laundering policies and all of the required licences"

Caring for the key yourself is widely regarded as the safest route, but takes real technical knowhow. The alternative school of thought recommends sending your bitcoins to a third party for storage, and letting that third party protect the key. Typically, that third party is a hosted wallet service—a company that specialises in the safekeeping and storage of bitcoins and their corresponding private keys.

This approach is simpler and takes little technical knowhow, but choosing a credible third party can be daunting. Look for those with sophisticated risk-management programmes, anti-money laundering policies and all of the required licences. They will likely be the most reliable.

Marco Santori
Counsel
Pillsbury

Bitcoins dually function as financial assets and stock investments. As financial assets, bitcoins represent a decentralised vehicle to exchange currencies while avoiding transaction fees and heavy government regulations. In addition, bitcoins can allow for indirect investments into countries that are hard to access, such as Venezuela.

> “Investors would avoid many pitfalls by taking the time to understand bitcoins and what drives their prices”

Like any other fiat or commodity-backed currency, bitcoins can be held as financial assets. However, unlike most other types of currencies, the bitcoin’s volatility is closer to that of stocks.

Investors would avoid many pitfalls by taking the time to understand bitcoins and what drives their prices. For example, fully understanding the block limit size controversy will allow investors to safely navigate the current situation. Doing this should enable investors to enjoy high-risk investments with high returns.

We are still in the early Wild West stages of digital currencies and it is unclear who or what will eventually win out in this space. However, for those brave souls that like to be on the cutting edge of providing customers new sources of value, digital currencies are an experiment worth conducting. They can add significant value to customers when completing payments, especially cross-border payments that have significant fees associated with them.

Through digital currencies you can enjoy great freedom in global payments with increased control and security through its transparent block chain technology. Fees are generally lower, with few merchant related risks. But there are obviously risks to any innovation like this, such as poor understanding of the technology and volatility in the currency’s value.

> “By being an early adopter, you can become better informed as to how to leverage this innovation to your competitive advantage”

But, by being an early adopter, you can become better informed as to how to leverage this innovation to your competitive advantage and achieve early market adoption among certain market niches that are eager to replace conventional currencies with digital ones.

If asset owners would like to take advantage of digital currency they should first realise that this technology is in its infancy. Be aware that there is a lot of new technology, good ideas that wont quite make it, a lot of vapour-ware, huge investments, companies going bust, and new technology being developed every day. Do your research. Remember there is more to digital currencies than bitcoins alone, such as the now quite mature NXT 2.0 block chain, which also has its own currency.

> “With adoption and a growing user base, the value in digital currencies, and the new technology companies in this space, is set to grow hugely”

I hear a lot of new people are ‘investing’ in bitcoins, but buying to hold rather than to trade. This may be out of sentiment, or it may be out of seeing the bitcoin go from $0 to $1000, and then back to $270—but does this mean it will go back up eventually?

A recent article that suggested if the bitcoin doesn’t evolve then it could be facing a slow death led to a 20 percent drop in the value of the bitcoin. What it has shown us though is that with adoption and a growing user base, the value in digital currencies, and the new technology companies in this space, is set to grow hugely. **AST**

Wendy Chu
Business analyst
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Christopher Wasden
Executive director, Sorenson Center for Discovery and Innovation
University of Utah

Lee Gibson Grant
Consultant
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Teenage kicks

Collateral management is on a journey of self-discovery, exploring a world across borders and taking on roles it never knew it could

STEPHANIE PALMER REPORTS

Collateral management is going through some changes. Coming in to widespread use in the 1990s, it is reaching the adulthood of financial services functions as it tackles challenges of new regulations and cost pressures, and grows from a background player to an entity in itself. Like all adolescents, it's striving to be taken seriously—albeit without the emotional turmoil and with significantly less acne.

The financial services world is a small one ripe for discovery, with many firms working across borders and over the course of 24 hours. As various regulations and restrictions have been implemented in different regions, collateral management functions have had to grow and develop quickly in order to accommodate the global variations—while creating extra efficiency to keep costs down.

On the face of it, market players on both the buy and the sell side appear to have made swift changes to manage the change. But Simon Lillystone, a consultant at SmartStream, suggests that, actually, collateral management has been a global activity for some years already: "Many firms, even if they're just working on a regional rather than a global basis, are using online systems that help them to handle margining in different locations."

"Of course, big firms might have multiple collateral management departments dotted across the globe."

He suggests that the real difference is the increased interest in collateral managers' activities, which is putting more pressure on them. With this comes technical development and futuristic solutions for managing collateral and margin that were not previously deemed necessary by financial institutions.

Lillystone says: "The aspect of reporting has become far more important, as well as the way that reporting is delivered across the firm. We are starting to see more use of the web and the intranet, and more solutions emerging with web-based components."

Andy Davies, CEO of CloudMargin, agrees with Lillystone's sentiment, suggesting that technology is the best way to mitigate the ever-increasing risk of non-compliance, leading to improved visibility and, ultimately, control.

He says: "With different regulations within different jurisdictions, firms need to have a better grasp of the international aspects of collateral management. With correct technology in place, buy- and sell-side firms can easily keep up with industry changes—integrating a system that allows them to mitigate risk, minimise human involvement where necessary, lower back-office costs and stay compliant."

The roll-out of Target2-Securities (T2S) across Europe also serves to make cross-border asset management that bit easier, with central securities depositories (CSDs) launching new initiatives with custodians and a European network taking shape between now—the first wave went live on 22 June 2015—and 2017.

Martin Seagroatt, director of marketing and product innovation at 4Sight, says: "The

plumbing of the system is now in much better shape than in the past. Individual firms on both the buy side and sell side now need to think about how their own systems interact with this new environment in order to maximise the benefits of it."

Seagroatt adds that, while some firms are reacting to this and implementing collateral management solutions to "fill recognisable and known gaps", some are taking their time and avoiding reactionary change.

He says: "Others are moving more slowly, reviewing how the need for improved collateral and inventory management fits within shifting trading strategies and the 'new markets'."

Cross-border access to assets may have advantages, but it's also not without its challenges.

The same regulations that have pushed collateral management to the forefront of the financial services agenda also mandate 'keeping-an-eye' on assets.

In the post-crisis industry, it's somewhat frowned upon to misplace collateral, especially if it isn't strictly yours. While in the past assets may have been rehypothecated several times, now tracking assets is of the utmost importance, and, conversely, collateral might actually have less reach.

Lillystone says: "Rehypothecation can make tracking tricky. The worry is that collateral is going around the houses between many parties that are using it to support each other. You could end up receiving collateral that was part of your own initial offering."

"Regulators have said that firms won't be able to rehypothecate more than once, which puts an extra fly in the ointment when trying to manage positions, and whether you have the right to use them."

He adds: "It's partly servicing, partly awareness, and partly knowledge of how assets can be used effectively. Some assets are technically out of reach, posted to a custodian. Managers will need to get those back at some stage, and they will need the tools to do that. That is where the buy side has come of age."

Ted Leveroni, executive director of strategy and buy-side relations at the Depository Trust & Clearing Corporation, adds to this, saying: "Leveraging global infrastructure is key in order to track the global movement of collateral. It simply cannot be done by relying on in-house solutions alone."

"The collateral lifecycle spans many relationships and counterparties, from trading partners to custodians to CSDs. Community-based standards and solutions need to be leveraged in order to accurately track and process collateral efficiently."

And ultimately, it is this efficiency that can lead to improved returns.

It may be imposed by regulation and pose an inconvenience to collateral managers, but, as Seagroatt says: "There is great value in knowing where the firm's collateral assets are, why they are there, and whether they are truly available for re-use."

"While it is a significant undertaking, implementing a single global view of assets and exposures can provide a significant return on investment through more efficient allocation of collateral and improved view of risk," he says.

"Furthermore, it can provide enormous benefits in a crisis where assets need to be sourced and allocated quickly."

Lillystone says that the shift has also made a difference to the power dynamic, giving buy-side participants more control over their collateralisation programmes and access to their own valuations.

Where previously they would have had to rely on the sell side to determine the valuations of exposures and collateral obligations, now, using their own valuation tools and collateral management solutions, "they're in a much better position to ask for their collateral back", explains Lillystone.

With valuations on the table and talk of trading, the question of whether collateral management functions even still belong in the back office is a point of contention. It's early days yet, and many firms are doing it differently.

Leveroni says firms are breaking down their internal collateral management siloes and moving to a more centralised approach in order to provide services across broader business lines. He says: "The industry has been talking about a centralised service model for collateral management for several years, but not many firms had committed to it until recently."

Seagroatt sees collateral management as, primarily, a service function. He maintains that the practice of using excess collateral to generate returns should be considered its own function, or as separate to the buy side. However, he also notes that collateral management is a risk mitigation tool, and so should remain "tightly aligned to the businesses it supports and to managers of a firm's liquidity and assets".

Davies, on the other hand, says: "I don't agree that collateral management has moved on from being a back office function. To a certain extent it's a myth that it's moved on—the functions of the back office have simply become more important."

According to Davies, the rise of collateral management has simply come as a response to buy-side challenges: regulatory constraints, changes in technology, and the risks of manual processes. He points out that these are all "classic operational issues".

"Certainly outside of the sell-side firms, there's no way it could be a separate business," he says. "It's a consequence of products that firms are trading—not an entity in itself."

Acknowledging the confusion that surrounds it, Lillystone suggests that while collateral management is a risk-mitigation tool, and largely belongs in the middle office—at least in a traditional sense—as it receives information from trading desks and settlements alike, its position can vary between firms. What he can clarify, though, is that collateral management isn't what it once was.

He says: "In the past, cash was the predominant form of collateral, so management was quite a simple activity."

"Now, many firms realise that first and foremost they're going to have to make use of different types of assets, such as securities and equities, and they're going to have to be much smarter in their allocation of their assets, whether they're retained for trading, for collateral, or for preservation and capital adequacy purposes."

"Collateral management is becoming bifurcated. On one side is the margining, with the collateral manager negotiating with the counterparties on what the margin requirement is."

"The other aspect is the actual collateral management—the servicing, allocating and optimising of the assets across the organisation."

While collateral management is breaking away, adopting new responsibilities and, arguably, taking on a life as a business in itself, it is also changing its focus, says Lillystone.

"The new aspect of central clearing is having a big impact on liquidity because firms are not only having to provide initial and variation margin—often on a currency-by-currency basis—they're also having to do gross margining rather than net on their trading exposures."

He adds: "They have to give away their assets as collateral where those assets can't be re-used, and that has an impact on capital and liquidity, making management that bit more difficult, and liquidity a growing issue."

With opinions and approaches varying across the industry, it's no surprise that collateral management is having something of an identity crisis. But if there is one constant, it's the recurring theme of risk management, protection and buffering against another financial crisis.

While some might take a 'been-there-done-that' approach to global crises, most are taking measures to ensure that they'll survive another, and in doing so are avoiding that eventuality.

Leveroni predicts that collateral calls will increase in correlation with new regulations, no matter where they may be implemented.

"Firms are deploying more robust technology, leveraging industry standards in communication and data flows, and turning to infrastructure providers who historically have the kind of industrial-strength technology that can scale to the degree that many predict will be required."

According to Lillystone, some are still approaching new regulations with a 'wait and see' attitude, just as they would any other risk management process, but he also names reconciliations as an important point, saying: "Firms have to have the right tools to make sure that their view of their collateralised world, both centrally cleared and uncleared, is the same as their counterparties'."

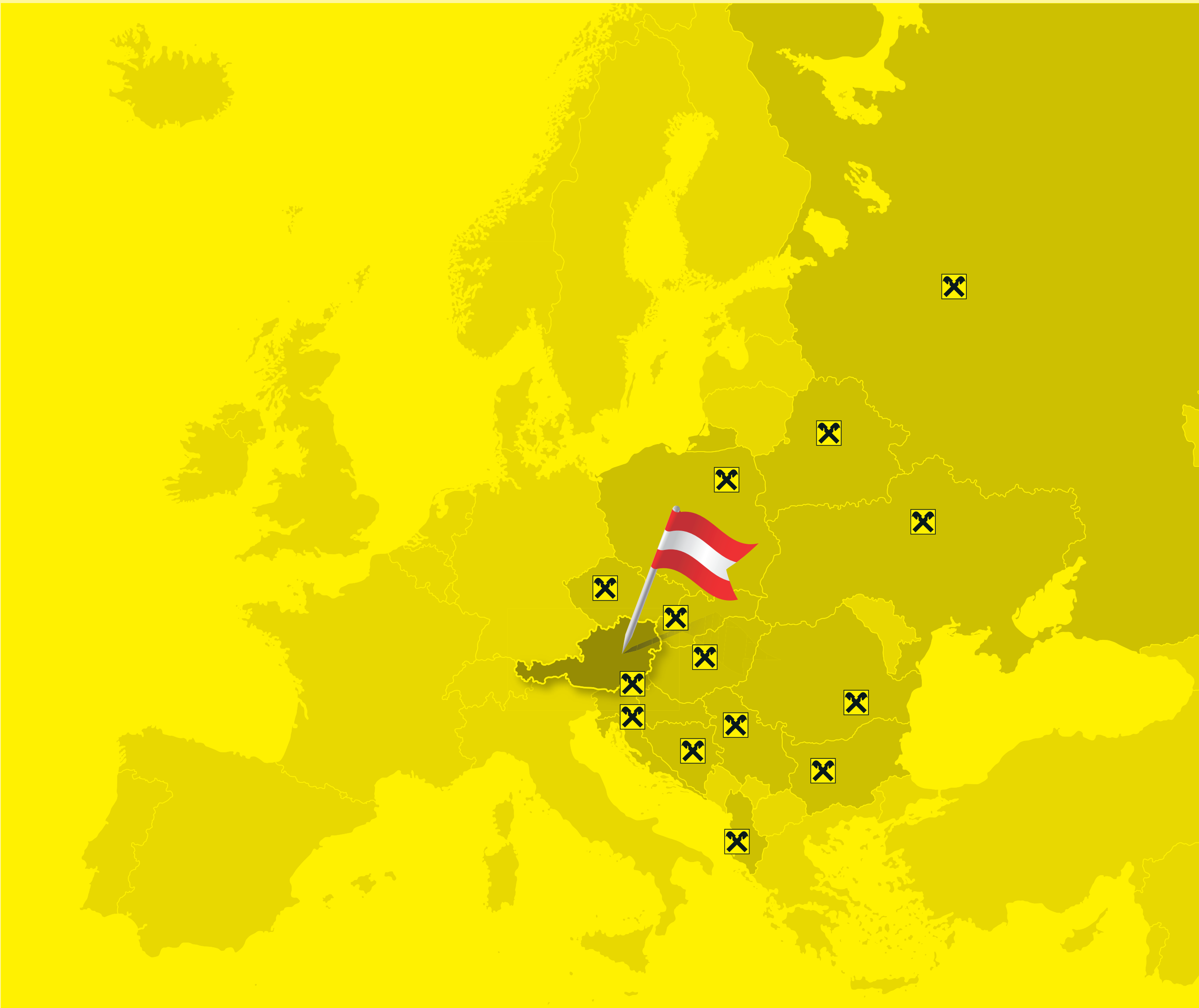
While Seagroatt places importance on "effective backup and recovery procedures … including automated failover and hot standby procedures", Davies says firms are "putting a lot more effort into proof of concept and an evaluation of the platform before they buy it", testing platforms in various scenarios before they even make a commitment to them.

With cross-border exploration, swift personal growth and lessons in the value of rules and regulation, this coming-of-age story is not the first of its kind or the last, and there is still plenty to learn yet. But the collateral management growth spurt certainly has the attention of the industry.

> "With cross-border exploration, swift personal growth and lessons in the value of rules and regulation, this coming-of-age story is not the first of its kind or the last, and there is still plenty to learn yet"

As Lillystone says: "All roads are turning towards collateral management at the moment."

Like any teen worth his salt, collateral management is cropping up in every conversation and dividing opinion wherever it goes. Whether its here to stay or just a phase remains to be seen, but didn't all financial services functions go through this themselves? **AST**



Coining it in

Currencies are evolving as technology spurs ahead and borders cease to exist

STEPHANIE PALMER REPORTS

If there's one thing financial services professionals can agree on, it's that the world is changing, and it's been said more than once that firms have to either adapt to the new world or risk falling behind.

The industry has never stood still, with constantly shifting trends and changes to funding patterns. Even regulations, contrary to popular feeling, have been on the move for decades.

But when it comes to payments, the industry is arguably moving in to unchartered territory. Currencies are shape-shifting, moving in to the modern, digital era with not a bank-note in sight, while previously domestic monies are becoming global super-currencies seemingly overnight—it's no surprise that market professionals are feeling a little flummoxed.

Over the course of the last year, the Hong Kong-Shanghai Stock Connect has opened up China to global investment, and allowed the renminbi (RMB) to start trickling out to the rest of the world.

According to SWIFT's RMB Tracker, there has been a significant increase in use of the currency in cross-border payments between Asia Pacific countries and China and Hong Kong. In these types of trades, South Korea saw an increased use of RMB to the tune of 173 percent, while Taiwan increased use by 45 percent, and Singapore by 19 percent.

Overall use of RMB for payments in Asia has increased from 24 percent of all transactions in the summer of 2014 to 33 percent this year, but the recent turmoil in the Chinese markets, and the devaluing of RMB by the People's Bank of China, means it's hard to see where the RMB will go next, and if it's expansion has gone as far as it's going to.

Vina Cheung, who is global head of payments, cash management and RMB internationalisation at HSBC, says: "The growth in RMB payments in general, and between China and Hong Kong in particular, is encouraging."

She adds: "The recent SWIFT RMB Tracker indicates that RMB is now the most actively used currency for payments within Asia to China, and we expect the growth in the use of RMB to continue."

On the other side of the world, in the midst of another financial crisis, the Greek island of Angistri has adopted a digital currency ecosystem using block chain technology, in a bid to stabilise its own economy. This is one of the first big steps towards a payments world that is almost unrecognisable, and this experiment suggests that it's more than a mere passing phase.

When it comes to digital currencies, Gene Neyer, senior vice president and product manager of Fundtech, which is now a part of D+H, doesn't see them coming in to the mainstream payments landscape any time soon.

According to Neyer, the bitcoin is currently the only viable digital currency in terms of liquidity, the level of maturity, and trust from its clients.

"It has achieved good penetration with early adaptors, and in special situations, such as merchants in countries with capital controls," he says.

However, Neyer maintains that until there is a real drive from the market away from traditional currencies, even the bitcoin won't be booming any time soon.

He says: "Currently there is no compelling reason for the wider market to adopt bitcoins in preference to traditional currencies, therefore we expect slow growth in the near-term future."

What might become more prevalent, however, is the use of the technology and the platform, rather than a switch in the use of the currency itself. According to Neyer, there has been an increased interest in rationalising and simplifying the current banking infrastructure.

He says: "The technology is being closely looked at by innovation labs in the banks. And some banks have moved to proof-of-concept to get a deeper look into the benefits and technology. Based on the results, we may see early adaptors making their bets, for example, Nasdaq has announced plans to use this technology in building a specialised exchange. I think that the next two years will be significant to watch."

On the other hand, Douwe Lycklama, partner at payments technology company Innopay, is fairly confident about the adoption of digital currencies, pointing out the ease of cross-border payments in a world where business is more international than ever.

"We are seeing exciting companies that address high remittance costs using the bitcoin as an easily-transferable intermediary currency between the payer's currency and payee's currency. Many governments have also expressed an interest in the applicability of digital currencies to their faster- and instant-payments initiatives."

Lycklama also praises the security of the system, something that could be questioned by cyber-cynics. He suggests that it could be this additional security that brings digital currency in to the mainstream payments world.

"On the block chain or distributed ledger front, this technology is representative of a more secure, robust and transparent ledger or database for value with less governance-related overhead. Due to the broad range of applicability it is safe to say that digital currencies, such as bitcoins, and blockchain will have a prominent role to play in payments."

If they were destined for the mainstream, digital currencies are, as Neyer says, "in the early stage of development", and it will be some time before they attain the same kinds of complexities seen in the 'real' world.

The culture of traditional currency is a long and established one, but some denominations have only recently found their feet in this old-school world, let alone the digital one. The RMB has only recently taken up its place on the trading floor through the Hong Kong-Shanghai Stock Connect, which is gradually opening the Chinese market through 'Q' schemes such as the qualified foreign institutional investor (QFII) and renminbi QFII (RQFII) programmes, which have seen investors entering the market from Luxembourg, Canada, Ireland, and elsewhere.

Florence Lee, head of China sales and business development in Europe, the Middle East and Africa (EMEA) at HSBC Securities Services, points out that the International Monetary Fund now recognises RMB as no longer an undervalued currency, and draws attention to the offshore RMB deposit, which, as of May 2015, stood at RMB 1.8 trillion ($282.2 billion).

She says: "Stock Connect does not only broaden the usage of the RMB offshore via investment, it also provides unprecedented direct two-way market access to the stock markets. Investors outside of China can access the China A-shares, and Chinese domestic investors have direct access to the Hong Kong securities market."

She adds: "The programme has also provided invaluable experience to Chinese regulators for future pilot programmes that may include instruments such as derivatives, futures and fixed income, or even cooperation with other markets."

On top of this, Lee suggests that this stock connect will pave the way for more, similar systems. With the Shenzhen-Hong Kong Stock Connect also on the cusp of launching, Lee cites reports that suggest 500 mainland stocks could be traded through this link. At the same time, the People's Bank of China has announced intentions to open the China Interbank Bond Market (CIBM) to certain international investors.

"Given the Chinese regulators have a track record of gradually opening up the financial market to foreign players, investors can also expect further relaxation of the rules or perhaps a 'Bond Connect' programme. The CIBM is heavily dominated by domestic institutions, and foreign participation only started in 2010 with the CIBM pilot scheme that allows three types of offshore institutions to access," says Lee.

She adds that additional products may soon become available to foreign investors, with the China Securities Regulatory Commission planning to allow foreigners to trade in the onshore commodities futures market.

"The State Administration of Foreign Exchange promulgated the relevant foreign exchange management regulations to pave the way for trading to become possible, and to open future doors for other domestic commodities if the initiative shows signs of success."

Investment in China and further internationalising of the RMB have been a long time coming, and each move has clearly been carefully considered and scheduled. The People's Bank of China and the regulatory bodies take no chances, and are seemingly in the process of increasing volumes slowly, bit by bit.

Arguably old-fashioned, it is also a tried and tested route to success, and while it bears an element of risk—Chinese stocks haven't exactly been stable of late—market players are at least playing a game they've watched, and played, many times before.

For those embarking on a digital investment journey, however, there is very little experience, and certainly minimal expertise, from which to take direction.

A paper recently issued by the SWIFT Institute questioned the stability of the bitcoin model, and the sustainability of its 'mining' system. The bitcoin works using open distribution, where 'miners' are rewarded with bitcoins for payments processing work. Participants form pools where they can share and trade rewards, and these pools form an essential part of the system.

While those participating in small pools can operate with reasonably low business risk, large pools can attack each other, with one 'miner' pretending to work on another's behalf then taking a cut of the proceeds without ever actually contributing.

According to the paper, these kinds of attacks are not currently very prevalent, with pools agreeing not to operate in this way. But the balance is unstable.

As soon as one attack happens, it's inevitable that parties will retaliate. This means profitability of public pools will drop and participants could move towards smaller, closed pools. Or, if pools grow too large, they could pose a problem for the entire system.

As digital currency is in such early stages, Neyer believes that issues like this will filter themselves out, and that those providers with the strongest models will survive.

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However, given its significant head start, he doesn't believe the bitcoin will be one that falls by the wayside.

He says: "Just like the car industry, which had many hundreds of manufacturers before the winners emerged, there will be a consolidation phase once the best models appear."

"I don't expect new currencies to seriously challenge bitcoins, since they don't offer a compelling alternative to overcome the lead that the bitcoin has built since coming into existence in 2009."

Lycklama takes a different approach, dismissing the idea that any instability in the bitcoin ecosystem would have a real effect on the asset servicing side of the payments process.

He points out that this kind of critique of the mining system is "based on game-theoretical scenarios that have not played out yet".

He says: "This critique is only applicable to non-permissioned networks—public networks between parties who don't trust each other—that use proof-of-work algorithms to enable consensus between the nodes, leading to relatively high energy costs for processing, but lower compliance and security costs."

"Asset servicing is most likely to take place on permissioned networks—private networks set up between trusted parties—that use a wholly different consensus algorithm and lower energy consumption, but higher compliance and security costs."

Lycklama suggests that, instead, the focus should be on the connectivity of the network itself—he believes that the real threat to digital currency is "not working together to realise the inter-organisational promise of the technology".

In order for the digital currencies to be adopted in to the payments sector on a global scale, those working on it should embrace collaboration. According to Lycklama, the most important priority now is for the industry to work together to create a harmonised system, rather than creating competing, non-complementary platforms. By combining forces, the result will inevitably be optimal functionality for everyone involved.

Lycklama says: "The collaborative space in this new world will look quite different, and it is this challenge the industry should take up. We should avoid competing standards due to uncoordinated research efforts, or the network effect being impeded by intellectual property claims or irrelevant pricing models."

"Seeing that the technology is so new and not all that easy to understand, open and honest dialogue between the institutions and regulators is also essential. Forming rigid opinions on these technologies, by authorities and incumbent institutions too early, in the process is the biggest mistake we can make, there is still much to be uncovered."

Neyer also hones in on the issue of over-regulation, pointing out that too much monitoring can tend to stifle the growth of new innovation.

He says: "It is possible that as the bitcoin becomes more widely used, the regulatory requirements will grow proportionately and choke off the development. Also, the negative publicity around high profile breaches, thefts, or technology glitches continue to delay adoption."

He also expressed concern that digital currencies—even bitcoins—have not yet created a mass-market strategy, casting doubt over the entire business model. He says: "The biggest threat is that the business model and business value for the mass market continues to remain elusive."

If currencies such as the bitcoin start to slow, investors could become disinterested, moving their focus to newer and more exciting prospects. Neyer admits this is merely a "distant possibility", given that funding levels remain steady, but it may be a concern for the currency's future.

It appears that we can expect the world of payments to change; whether it's a move towards the cyber sphere where traditional denominations are obsolete and funds can cross borders as easily as emails, or simply a space where RMB is a widely recognised and used currency throughout Asia, and beyond.

Predictions are vague and tentative, and the over-riding feeling is that we just don't know. Technology is moving so quickly that it's difficult, even for tech firms, to keep up, and volatility in the Chinese market makes developments on the RMB hard to predict, too. Neyer says: "I expect that there will be a lot of activity in crypto-vendors pivoting the technology as relevant business opportunities are identified for the crypto-infrastructure."

Lee on the other hand thinks that the internationalisation of RMB will continue and that the Chinese economy is on its way up, saying: "The internationalisation of RMB is an integration of it as trade currency, investment currency and as reserve currency."

She adds: "Each step complements the other and can deliver benefits to the Chinese economy. Reduced foreign exchange risk will encourage further trade and investment developments between China and the international community; increased foreign participation in the Chinese securities market will increase standards; and cross-border business will increase."

"Ultimately, it will mean that China continues to rise as a world super power and further increases its influence on the global economy." **AST**

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The butterfly effect

Small changes can have big consequences, and the only way to stay informed is through a single common model, says SmartStream's Philippe Chambadal

STEPHANIE PALMER REPORTS

Would you agree that new regulatory obligations are putting current data processes under duress, and that budget constraints ask firms to do more with less?

It's a difficult and ongoing question, and it has been the same for the last six or seven years for financial firms. Various new regulations across the globe have put constraints on budgets all at the same time, even though business volumes have not recovered to pre-crisis levels yet.

The regulations are a must, but we believe that if every firm approaches them alone, building their own solutions, they will end up with duplicated services, when actually they could have used a mutualised or utility-based service to do the job once, for the whole industry. In terms of data governance, I think utilities are the only way forward in terms of time-to-market, efficiency, and the ability to comply with regulatory requirements in a timely fashion.

Are financial institutions looking for new approaches to managing their data?

Absolutely. There is an enormous amount of fragmentation in data management. There are often many functions within one firm—there may be one group that handles fixed income, another for corporate actions, one for ratings, and another for exchange-traded fund data or indices.

It can also be fragmented by business units and geographies. You can end up with dozens, or sometimes hundreds, of sub-systems, all trying to solve their own the data management issues.

All the data needed to run clearing and settlement processes and post-trade processes should be handled as one single mechanism, managing reference data, pricing, corporate actions, issuer data, and everything else, all as a single process.

There is a danger that firms will end up chasing data without understanding the workings of the processes, for example, the ripple effects of a corporate action, or a new issue that could affect all the subsystems.

If you don't manage data as a holistic set, you become exposed to having applications using wrong and/or inconsistent data.

If you're trading with a counterparty and that counterparty happens to be an issuer of debt, it might have a common stock, options trading off that stock and debt instruments. This means three asset classes to take in to account, plus, the stock might be part of an index, adding another data set on top of that. If there is a split in the common stock, all other data types are going to be affected.

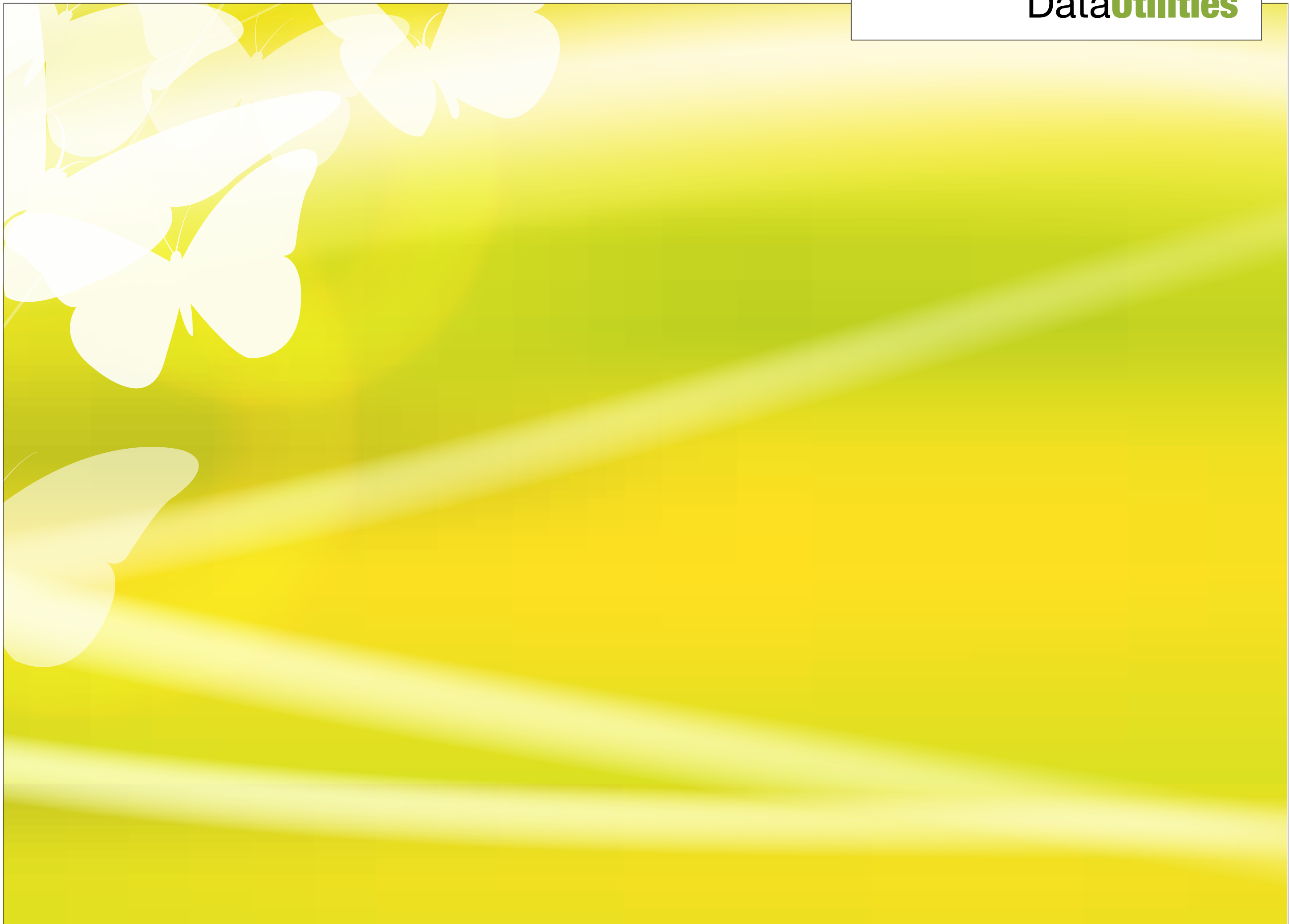
Here, it is important to have a single data model that captures the issuer, the counterparty details such as settlement instructions, the corporate actions of the issuer, and all the instruments that the issuer issues.

This is the only way you can be confident of a net that captures everything. If it only captures 98 or 99 percent, there is still risk exposure.

The interdependency between all these different data types is causing a lot of problems. As long as they are managed separately, depending on asset class or where they are in the trade cycle, there are going to be inconsistencies.

What does the Reference Data Utility mean for the industry?

We built the Reference Data Utility (RDU) five years ago with the goal of capturing all the external data a firm needs to run its back-office processes, including the cross-referencing, cleansing and enrichment needed to clear and settle trades.



The goal is to improve straight-through processing (STP) rates, as 35 to 40 percent of trade breaks happen because of data mismatches. We are the leading reconciliation solution vendor and have a precise idea of why trades break.

Our utility provides a high-quality, enriched data set that can eliminate these trade breaks proactively. The biggest impact is reducing the downstream ripple effects of bad data and the associated trade repair costs—that is where clients see the biggest return on their investments.

It costs between $50 and $1,500 to repair a broken trade, and, as with most business processes, the earlier you can fix the problem, the cheaper it is to fix. We want to be pre-emptive, fixing the problem before it breaks the trade. We can see that a trade is about to fail because the reference data is mismatched, and the software will alert the utility, resolve the problem in real-time, and complete the trade, avoiding the fail in the first place.

We have a lot of data points from a large number of clients, and the efficiency has proven itself many times. Typically, for a data management client, budgets are reduced by 30 to 40 percent in the first year, and in terms of avoiding trade breaks, we're seeing cost reductions of up to 90 or 95 percent. It makes a very significant difference.

What kind of data management challenges will we see in the future?

Regulators are pushing for a better data governance framework. They want to make sure that whatever an employee of a financial firm does to a data set, that change is properly documented, controlled and auditable. For example, if a data point from a data vendor is modified, it might affect regulatory reporting. Regulators are looking for complete traceability on who changed the value, when, why and if there was supervisory control.

This is what the utility intends to do. It includes a complete audit function that shows clients, regulators and auditors what exactly has been done and when, and it keeps track of those changes forever.

Large banks have hundreds of sub-systems and many segregated lines of business such as custody, prime brokerage, asset servicing, and more, so trying to create a framework like this in-house is an expensive, long-term project. If the reference data management processes are run as a utility outside the firm, the service can be delivered and live in a matter of weeks, yielding much greater return on investment.

On top of this, an in-house system is only ever as good as the counterparty's system, and a firm is only as good as its counterparties' systems. Mutualisation of these internal processes is the only way: one data model and one high-quality data set used by all firms, at the same time. **AST**

Philippe Chambadal
CEO
SmartStream

Adapt and thrive

Investment managers are aware of what the new regulatory environment means for their businesses, but they're taking a fresh look at how they manage liquidity. Bank of America Merrill Lynch's Henrik Lang explains

For investment managers, the regulatory factors currently affecting liquidity management need no introduction. From the liquidity coverage ratio (LCR) to money market fund reform, there is a clear awareness of the changes currently coming into effect, and the impact of these changes in the liquidity space.

Less widely discussed is how investment managers can continue to be effective despite the challenges of today's market and regulations. Investment managers are increasingly recognising that they need to change the way that liquidity is managed.

One of the most significant shifts relates to the way that cash is viewed. In the past, investment managers tended to regard cash simply as a by-product of securities settlement and a means of executing a trade.

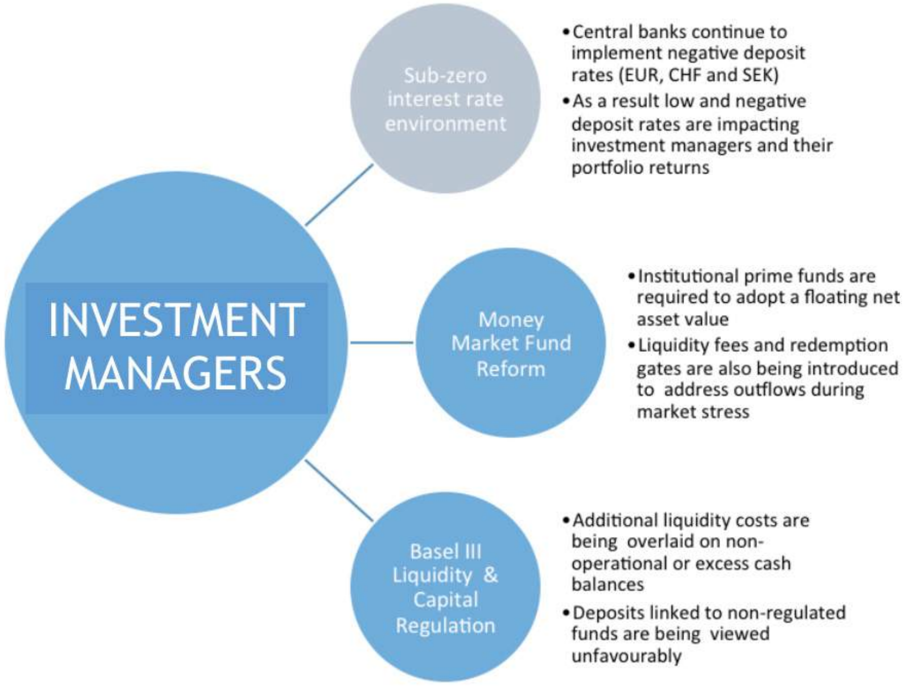
The focus was squarely on managing the portfolio, deciding which equities to buy and choosing which strategies to follow.

This is now changing and investment managers are beginning to think about cash in a more strategic way. With interest income being affected by additional liquidity cost and replaced with charges, investment managers are becoming more mindful of how cash is managed and are looking for strategies that will enable them to manage cash in a more sustainable way.

The benefits of a new approach can be considerable. Against the backdrop of the low-interest rate environment, a key goal is to minimise interest rate charges on excess cash balances and on currencies with negative interest rates, such as the euro, Swiss franc and Danish krone. At the same time, investment managers are asking how they can increase the efficiency of their operations. For example, automated investment sweep solutions might reduce operational overheads and limit processing errors. A further goal is to improve the overall investor proposition by enhancing returns on cash and reducing the liquidity cost base.

In order to achieve these goals, investment managers are paying close attention to three areas:

Pressures Affecting Investment Managers



Understanding how balances are viewed

Not all cash balances are equal. From unencumbered cash to portfolio cash, numerous types of cash are involved in the investment lifecycle, and these are all viewed differently by regulators as well as custodians. An important first step in developing an appropriate liquidity strategy is therefore achieving visibility over cash type.

It is also important to understand how custodians and prime brokers across different jurisdictions are implementing the new rules. While new liquidity measures are similar for all providers, there can be minor variations in each country's central bank interpretation—so investment managers should take the time to understand exactly how custodians view their various cash balances.

An important first step should be to have an open conversation with custodians and prime brokers in order to understand what percentage of cash is viewed as operational and non-operational, and whether the business is classified as a corporate, financial institution or non-regulated fund. Some investment managers decide to concentrate balances with core operational providers because they regard balances linked to operational activity as more valuable.

Making better use of off-balance sheet and term deposit solutions

Banks have liquidity products to help investment managers deploy non-operational balances more effectively. These should be carefully considered to identify any opportunities for more effective liquidity management.

The products on offer may include both off-balance sheet and on-balance sheet solutions. Off-balance sheet solutions might include prime or treasury money market funds, as well as repos and commercial paper.

Investment managers have long considered money market funds as an effective alternative for excess cash. Along with this consideration, many investment managers are now also considering updating investment policies to take into account critical regulatory changes such as the introduction of floating net asset value, liquidity fees and redemption gates.

On-balance sheet solutions could include stable deposit accounts, call accounts and term deposits.

As well as choosing the right solutions, investment managers should aim to increase their operational efficiency. Target balance sweeping solutions, for example, can be employed to move non-operational balances into off-balance sheet investment vehicles on an automated basis, potentially improving the efficiency of the liquidity management process.

Implementing integrated solutions

Custodians can offer easy access to the full suite of off-balance sheet liquidity solutions, for example, by providing automated investment sweeping in to money market funds.

Some alternative investment managers, such as hedge funds and private equity funds, are beginning to tap into this by opening their own custody accounts in order to optimise liquidity.

This trend is also driving greater demand for integrated solutions that provide greater visibility. By offering a single user interface and securities processing platform for prime brokerage and custody, providers are making integrated liquidity solutions seamless, efficient and more attractive.

Investment managers are highly aware of the regulatory changes affecting the industry. The next step is to adapt to the new environment for ongoing success.

With a clear understanding of the challenges, investment managers are asking for alternative solutions that may help them avoid significant costs, improve operational efficiency and enhance their investor propositions. **AST**

Henrik Lang
Global liquidity and escrow product head for global custody and agency services
Bank of America Merrill Lynch

Bigger is always better

The bigger the challenge, the more opportunities it creates, according to Guillaume Heraud of Societe Generale Securities Services

STEPHANIE PALMER REPORTS

What kinds of changes have fund managers had to make in response to new regulations?

The regulatory approach has changed over the last few years. After the financial crisis, institutions were required to have a policy in place to deal with risks of their business, mostly based on dedicated means.

Now, financial institutions are required to show that they have correctly assessed risk, and defined a commercial policy and a risk framework adapted to that assessment. They have to prove that they have not only the means dedicated to covering that risk but also that those means are sufficient and fit for purpose.

This new paradigm has an impact on the cost base for fund managers and financial institutions as it implies the need for a very large investment just to comply with regulatory requirements.

From a strategic point of view, institutions have to assess the impact of this new regulation on their current business and they have to make some difficult choices regarding their profit and loss figures. If a firm chooses to continue doing business the way it has always been done, then complying with the new regulation will mean accepting the related costs. If they do not want to make that investment, they will have to seriously consider changing the way they do their business.

Costs will include significant IT adaptations, but firms will also have to employ expert staff. It can be difficult to have a team available that covers the full scope of knowledge required, and has the capacity to deal with all of the affected functionalities.

There is also a cost to developing new external connectivity. For example under the European Market Infrastructure Regulation and for over-the-counter (OTC) derivatives, that means connecting with central counterparties, clearing brokers, trade repositories and other counterparties.

All of this could affect the profit and loss margins of those institutions, and that could definitely lead to a change in their business models. They have to make a choice. Some will choose to give up certain activities—many are starting to trade fewer OTC derivatives, for example—but many others are turning to outsourcing as a solution.

Which processes do they tend to outsource, and which do they prefer to keep in-house?

It makes sense to keep in-house those things that have added value in the process. For funds, that would be client management and investment strategy, which are a key part of their core business.

It's clear that fund managers are not intending to be processing specialists, but it is still important for them to understand the stakes associated with outsourcing, while focusing on their investment activity.

Nevertheless, all the complex post-trade processes that require specific expertise or critical mass, such as OTC derivatives or collateral management, could be outsourced, and there are many providers in the market that already offer solutions.

Anything regarding back- and middle-office functions, including parts of the risk monitoring and know-your-client (KYC) processes or the valuation of portfolios, could be outsourced to experts. Those providers have invested in that particular business and they bring with them the critical mass and high levels of expertise, making them valuable partners in performing these functions.

Does the outsourcing of regulatory responsibilities effectively mitigate risk, or should firms be responsible for their own regulatory compliance?

When it comes to regulatory responsibilities, firms remain responsible for their whole regulatory compliance, but by outsourcing those functions they're relying on the industrialised platform and the processes of their providers. In order to make sure those processes are fit for purpose and to have a complete understanding of what they do, they really need to have a strong relation of proximity with their operational partner.

It's a matter of defining key performance indicators and an efficient trans-management policy, but, more importantly, in order to be efficient and successful, it means investing in the relationship, and remaining involved with the decision-making. This way firms can avoid ending up with something that is not correctly monitored.

So, it is partly the responsibility of the provider to set up a monitoring framework and to make something that is completely in the hands of the client. Even if we are talking about industrialising processes in order to get the best prices and something that is really mutualised, at the same time it is absolutely key that the client has something that meets its needs.

For example, in collateral management there tends to be a phase where the implementation of the service with the client has to be very carefully operated to make sure the provider has a good understanding of the client's portfolio, the products, and all the different counterparts, as well as the ability to connect and implement links.

Outsourcing functions can be a very important part of the life of an institution, and it has to be carefully managed to ensure a win-win solution.

How do the benefits of outsourcing compare to the costs?

Our experience is that by outsourcing functions to an industrialised organisation, clients could benefit from really large cost savings. For example, in the brokerage space, we saw a client reducing its back-office costs by 60 percent just by outsourcing to an external processing partner.

However, I don't think the main benefit for clients is only to avoid the cost of investment. We also have to take in to account the access to the expertise of the provider, which will also provide gains in terms of efficiency in the way you are doing business.

On top of this, outsourcing to a larger processing organisation could open new possibilities for business. We know that some asset managers, having made the decision to outsource their middle office, have realised the possibility to access other asset classes through their provider.

For example, firms with a focus on cash equities or fixed income may have found opportunities to trade OTC derivatives because they now have a provider that is able to manage the post-market processes for them. While outsourcing is likely to be cost-effective, the benefits go way beyond that.

Which regulations have posed the biggest challenges to wealth managers? What are the major hurdles still to come?

I think we have quickly moved on from a situation where regulatory constraints were mostly external rules requiring a formal respect to the definition of an internal and personal policy aligned with those regulations.

Financial institutions have to really demonstrate how they are protecting the interests and the assets of their clients, and also that they are protecting the market against dangerous behaviours.

Again, it's a matter of better selection and knowledge from customers, collateralising exchanges, better definition of policy in terms of market abuse, and more reporting to regulators.

All of this will increase the level of regulatory constraints for institutions, and the level of investment required. It can be very costly, and if firms want to be ambitious in their commercial policy, they have to carefully manage the associated costs.

Finally, it is a real challenge for the financial services industry as the regulatory framework is becoming increasingly demanding. But at the same time, opportunities are emerging, as are new ways of making business. More institutions are considering outsourcing, and I think things will continue to go in this direction. **AST**

Guillaume Heraud
Global head of financial institutions and brokers segment
Societe Generale Securities Services

Going global

With the first wave of T2S underway, Demi Derem of Broadridge discusses strategies to build competitive advantage in a global marketplace

MARK DUGDALE REPORTS

June marked the start of the migration to the T2S platform in EU markets. What are the implications of this market change in the post-trade environment?

Target2-Securities (T2S) is one of the largest and most complicated technology infrastructure projects launched by the European Central Bank in recent times. It is intended to bring about substantial benefits to the post-trading industry by providing a single pan-European platform for securities settlement that will improve EU market efficiency. While T2S will drive greater efficiency, we are likely to see increased volumes in cross-border trading.

All this has caused market participants to rethink their future business and operating models. Broadridge fits in by continuing to build innovative, mutualised managed service solutions for T2S-affected custodians, brokers and central securities depositories (CSDs).

'Mutualisation' is a term we've been hearing a lot lately. What benefits can the industry hope to see from the mutualisation of proxy services?

'Mutualisation' is a term we use to describe how we deliver our proxy processing services to custodians, brokers and CSDs. It is the essence of our managed services outsourcing model. It allows participants, and the industry as a whole, to manage complexity, and leverage economies of scale and our best practices model.

There are service providers that can invest sufficiently in their infrastructures to deliver pan-European solutions. We have already made, and will continue to make, significant investments in both technology and people to ensure we are able to deliver end-to-end solutions in a post-T2S world.

How are custodians addressing asset servicing requirements in the post-T2S environment?

The feedback we've been hearing from our custodian clients is that they have a keen interest in end-to-end proxy outsourced solutions. We're also hearing that there is a need for other functions that could be developed based on a managed service model. One of these, for example, is expanding the functionality of our corporate actions library to include notification capabilities.

Even within a pan-European asset servicing environment, there will always be specific local market requirements that will have to be met. Can a managed services or mutualised model support unique market requirements?

Absolutely. In markets around the world, we have built local market solutions that address unique characteristics by leveraging our Global Proxy processing infrastructure and extending our service offering. We've done this in Japan, the UK, the Netherlands, Canada and the US, and will shortly be deploying end-to-end Global Proxy local market solutions in Germany, Italy, Australia, Hong Kong and New Zealand. In addition, we are working closely with many of our custodian clients to support their future eurozone operating model strategies.

What do those solutions include?

Our Direct Market Solutions (DMS) extend the Broadridge Global Proxy management platform through tailored solutions for local markets. The Global Proxy solution includes several services: centralised meeting creation, delivery of ballots, collection of vote instructions and onward lodgement to the local market custodian. DMS enhances this offering through local market services such as the direct sourcing of meeting announcements and related meeting materials, translation from the local language to English, and execution of vote instructions in local markets through direct delivery of the local and cross-border instructions to the CSD, issuer or issuer agent/register.

Many Broadridge clients have already subscribed to our enhanced DMS offering. While some have utilised DMS on a standalone basis to support their key markets, most are now looking to utilise DMS in conjunction with our traditional Global Proxy solution to offer end-to-end global proxy solutions to their underlying institutional clients.

DMS means our clients now have a robust, end-to-end proxy process solution, built on a proven and trusted global infrastructure. This gives them an enhanced risk control environment, with increased automation and operational process efficiency.

How do you expect the industry's business processes to evolve? What key trends do you anticipate?

T2S prescribes a harmonisation of settlement processes that will encourage even greater volumes of cross-border trading. Coupled with regulatory change affecting asset and cash pooling, the environment will likely create further interest in the harmonisation of practices with the second, third and fourth waves of adoption of T2S.

With that said, it's fair to assume that business processes for asset servicing must also evolve to support cross-border proxy processing and increasing meeting volumes, in the EU and around the world. Given the enormous focus on automation and risk management, a managed service model—for global proxy processing—is the kind of change industry participants will need to make to gain operational advantage. AST

Demi Derem
General manager, investor communication solutions international
Broadridge

Keeping your core

Banks and broker-dealers are refocusing, says Pershing's Scott Coey

The rapid change of technology and onslaught of regulation mean every investment bank and broker-dealer can no longer ignore the need to overhaul their market infrastructure. Relying on piecemeal, outdated systems will hurt their ability to comply with the ever-evolving regulatory and infrastructure changes. How long can firms put up with these costs when now more than ever, they need to invest in their solutions to reinforce their competitive advantage? Outsourcing allows firms to delegate key middle- and back-office functions while focusing on developing innovative, market-leading solutions for their core, revenue-generating business lines. The question is no longer 'should they outsource?', but rather: 'why haven't they outsourced yet?'

The cost of compliance

A challenging regulatory burden adds to the pressures of a competitive marketplace. While the market is currently aiming at improved transparency and best execution, increasingly fewer firms have the required capital to remain compliant and invest in the technology and people required to adapt to the pace of industry change to remain profitable.

The capital expenditure required to deliver the technological enhancements and new systems to address these challenges is significant. While investing in compliant technology is key, the regulatory expertise and focus is of paramount importance. Adapting to a more complex environment is not something that banks and broker-dealers can afford to face alone.

Basel III

The requirements of Basel III pose significant challenges for banks and broker-dealers and are causing them to reconsider their strategies. Pre-crisis, the banks managed the liquidity between themselves and the buy-side. Post-2008, a retraction from capital markets by many of the large players saw the dawn of a new breed of brokers: the boutique broker-dealers filling the gap left by the large players.

It has been well documented that profits in fixed income, currencies, and commodities (FICC) have declined in recent years. This has already brought a series of cuts across this sector and it will continue to raise the question about large players' commitment to this market: how much further can revenue fall before they pull out of the market? Banks are re-evaluating the profitability of their businesses and refocusing on revenue-generating and core business while distancing themselves from the more expensive, less profitable ones.

In the fixed income business, the increased running costs, the compliance oversight and the impact of Basel III on cost of holding inventory, has significantly increased, putting even more pressure on an already fragile product within investment banking. The banks will either have to pass on the costs to the buy side, accept largely reduced margins, or exit those businesses.

MiFID II

At the same time, the Markets in Financial Instruments Directive (MiFID) II will realign fixed income products to migrate from over the counter (OTC) to organised venues, leading to buy-side firms trading on a new breed of emerging platforms. This will transform the way investors and facilitators of fixed income business operate.

MiFID II also throws up significant challenges for banks and broker-dealers through requirements on post-trade reporting. It will extend the transparency requirements that MiFID I brought to equity markets to a wider range of asset classes while addressing the problems caused by market fragmentation and dark trading. An example of MiFID II requirements is the wider range of data fields to complete for transaction reporting. It will become much more extensive, requiring significant resource and adding additional costs.

MiFID II will further affect banks and broker-dealers through the unbundling of dealing commission. The revenues generated from research will be less reliable as the buy side can be more specific with its demands and pay on an individual deal basis. This will force banks and broker-dealers to differentiate their offerings and strive to provide unique information that competitors cannot.

This is creating a new market order, where the buy side and asset owners are being selective on how they use the banks and broker-dealers: investment banks for balance sheet products such as prime brokerage, and boutiques for a more personalised service or research.

Complying with new regulation has a price tag, and overhauling the underlying technology is laborious and costly. The Central Securities Depository Regulation (CSDR) is a prime example of a regulatory change that requires efficient technology for success. It placed a significant burden on the back and middle offices of banks and broker-dealers. The move from a T+3 to T+2 settlement window significantly reduced processing times, but the transition required scalable settlement systems that had to compress what they were previously doing in three days into only two.

Outdated technology

The need for up-to-date technology

As evidenced by the CSDR example, it is essential that, in order to keep up with the pace of regulatory changes, banks and broker-dealers have the systems that support their heavy processes and increasing reporting requirements, and the supporting technology to enable them to adapt to new requirements and the corresponding market conditions.

It is a reality that many firms still operate on unwieldy proprietary infrastructure that has been developed over the years with myriad legacy technology systems. They are no longer fit for purpose in the more onerous and fast changing post-financial crisis landscape. Much of the current technology build has its roots in the 1980s. Most banks and broker-dealers adopted a 'plug-in and add' approach to updating technology resulting in a spaghetti junction of systems, but the pace at which technology is moving means this strategy no longer works.

Investment banks and broker-dealers need to rethink how they will comply with regulations as the traditional siloed technological approach is out-dated. Firms need to employ the advanced technology and adopt a much more integrated approach. However, this is not only an expensive proposition but also a resource-intensive exercise at a time when margins are being squeezed, balance sheets are shrinking, and finding new revenue generating opportunities is not easy.

A technology-led market infrastructure change

The Target2-Securities (T2S) project delivers vast main market infrastructure change, with new opportunities in the ability to connect directly with a large number of CSDs.

T2S is first and foremost a technology platform, and a successful T2S strategy will require significant ongoing investment in new systems and solutions. Not everyone will be prepared to meet that cost.

Outsourcing to a central technical platform as opposed to staying with the existing domestic connections will continue to present a challenge for the industry over the next three waves of T2S. Historically, banks and broker-dealers' profits were enough for them to reinvest in technology. Today, a shortfall in revenues and heavier capital requirements put significant pressure on budgets.

The benefits of outsourcing

Outsourcing is an obvious solution to the many challenges facing the banks and broker-dealers and one that has long been adopted by buy-side firms as a differentiator to effectively capture new, and retain existing, clients. Firms can enhance productivity and sharpen their competitive edge by moving from a fixed to variable cost base. This enables them to focus on core business areas and develop more value-added products.

Even those banks and broker-dealers with the deepest pockets will struggle with the technology spend required to comply with the plethora of regulations coming through.

So far, banks and broker-dealers have been somewhat reluctant to follow their buy-side counterparts, preferring to internally manage their middle and back offices. However, retaining their positions in the top league has become increasingly difficult and outsourcing is not only more cost-effective, but also a long-term, sustainable solution. It future-proofs the upcoming costs that inevitable upgrades will bring.

The simple truth is that if firms do not invest to upgrade their infrastructure and focus on their core business, they risk being left behind in an increasingly competitive marketplace. In order to be competitive, banks and broker-dealers must focus on innovation, looking at the services and solutions they can offer clients to differentiate themselves from the market. Firms must diversify or opt to streamline their businesses to focus on the most profitable, core revenue streams. They must assess where they want to be in 10 years, and importantly, consider whether this will be achievable without complete focus on establishing a new business model.

This focus on value-added propositions will take resource away from core standard processes, which can be efficiently and cost-effectively managed by an outsourcing partner. However, the choice of an outsourcing partner is as important as the choice of outsourcing itself. Today, it is a strategic decision, made by all members of executive boards: chief operations, financial and compliance officers.

Outsourcing involves understanding operational changes, but also the strengths of the partner's balance sheet, and its expertise of the regulatory environment. Banks and broker-dealers need to take that in to account and choose a partner that is committed to those services and will keep investing in them.

A successful and trusted partner such as BNY Mellon Pershing, with outsourcing and provision of clearing, settlement and custody as its sole focus, will enable banks and broker-dealers to adapt to the changing market landscape, support compliance with a significant regulatory burden, and deliver the innovative, technology-driven solutions that will drive streamlined success through the next 10 years and beyond. AST

Scott Coey
Head of broker-dealer services EMEA
Pershing, a BNY Mellon company

Harmony begins at home

Countries looking to reform their capital markets need look no further than Euroclear for a reliable partner, according to Jo Van de Velde

The liberalisation of capital markets around the world, allowing easier access for international investors to local markets and greater harmonisation of trading and settlement practices, is widely viewed as a catalyst to economic growth. The associated alignment of regulations and market practices is seen as a key building block in helping achieve a level playing field with which international investors feel comfortable.

Regulatory harmonisation and market practice harmonisation often have very different origins. The former is often the result of either a financial crisis, such as that of 2008, or a shared political need, such as the creation of a single market in the EU. Following the financial crisis, banking and securities market regulation is now driven, not by local authorities, but by global bodies such as the G20, the Financial Stability Board (FSB), the International Organization of Securities Commissions (IOSCO) and the Bank for International Settlements. This means that more and more regulation has greater global commonality—just look at recent rules on banking capital adequacy, derivatives trading and central counterparty clearing. These global initiatives then need to be implemented consistently on a local basis. This is often complicated, as in the ongoing case of the recognition of US and EU derivatives clearing rules.

Market practice harmonisation also requires a unifying common interest, which could also be political, but is also often more practical and economic as market participants try to reduce costs and increase efficiency. It usually means the harmonisation of rulebooks, communication and processing interfaces and message standards, and interoperability between technical systems across an economic area. These processes can play a vital role in integrating markets, delivering a level playing field and reducing costs for all investors and intermediaries. No securities market can be said to be fully integrated if its post-trade arrangements are not harmonised, ensuring safety and full competition, and removing barriers across national markets.

But even where there is such a common interest, the work to harmonise and integrate market structures is long and hard even in a single economic area like the EU, where many countries share a single currency. For instance, the Giovannini reports of 2001 and 2003 outlined 15 barriers to efficient EU cross-border clearing and settlement that have taken over 14 years to remove, and some still remain.

The development of Target2-Securities (T2S) will ensure that, for the first time, the eurozone's settlement systems will operate on a common platform, with common opening hours and settlement processing. The associated market practice harmonisation work has been immense with the European Central Bank and the market identifying, and progressing, 16 high-priority harmonisation initiatives with eight longer-term initiatives already underway. Indeed, we would argue that the combination of the new EU Central Security Depository Regulation (and the global principles for financial markets infrastructures agreed by the Committee on Payments and Market Infrastructures and IOSCO) and the introduction of T2S together represent the most important building blocks for a capital markets union for post-trade services.

Europe's political structure, however, is unique. Elsewhere, harmonisation and regulatory convergence is primarily linked to the need to expand investment flows and to attract external investment capital to a region. International investors increasingly expect to be able to use international standards and international business processes, and to be subject to consistent regulation when accessing local markets. In a globalising economy, national policymakers now not only have to implement global regulatory initiatives, but in addition, find that they have to consider using international best practices to avoid the potentially destabilising effects of regulatory arbitrage.

Even if there is willingness to invest in improved securities market infrastructure, implementation has often proved time consuming and costly, due to the challenges of collaboration and the tendency to operate in country silos. Globally, securities markets can learn valuable lessons from the successful harmonisation already under way in various regional payments markets, such as the growth in the Southern African Development Community Integrated Regional Electronic Settlement System payment system, which went live in September 2014.

In Asia, the focus has been primarily on how harmonisation and integration can enhance the development of the Asian bond markets under the ASEAN+3 Initiative. A pilot platform involving Bank Negara Malaysia, the Hong Kong Monetary Authority and Euroclear was launched in 2012. At the same time, the Asian Bond Market Initiative is looking at other regional integration and settlement architectures. Progress here will be driven in part by the implementation of the G20 and FSB regulatory agendas.

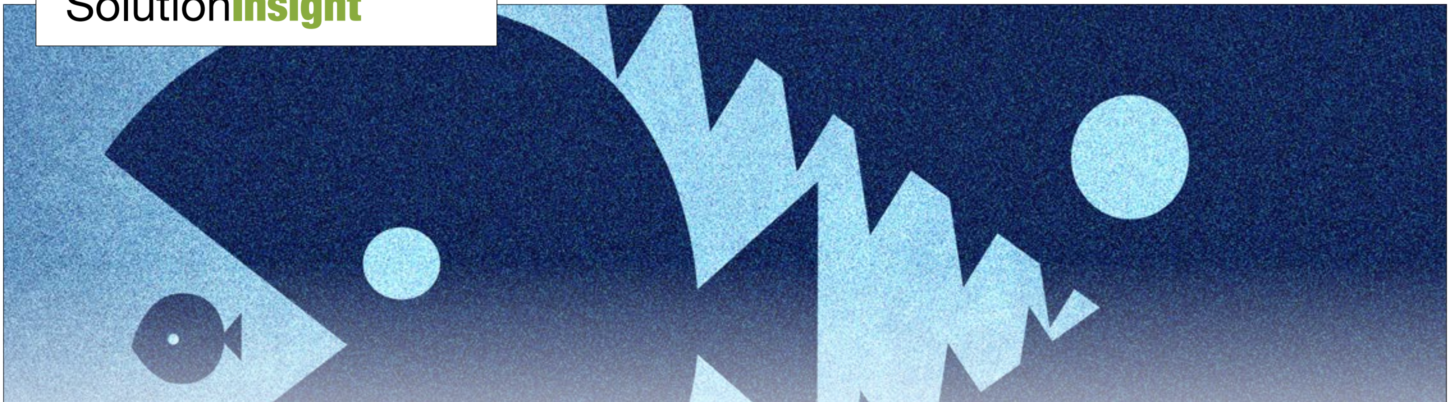
For instance, regulatory changes in the major Asian financial centres will likely require initial margin for both counterparties and a reduction or removal of thresholds for variation margin. This means that there will be an increasing demand for collateral, which, in turn, will require increasing integration of Asian bond markets to satisfy the increased demand for high quality liquid assets.

Only a neutral infrastructure like Euroclear can work to understand each country's position and work with its authorities to come up with tailored structures that meet their demands, while enhancing access to international investors and allowing market participants to realise operational efficiencies.

Where countries are looking to reform their capital markets and engage more actively with international investors, a partner that listens and can work with the market authorities is required to help develop an appropriate capital markets regime.

But above all, we understand that different markets are at different stages in their development. Our approach is to tailor solutions around the individual country's agenda. Harmonisation and liberalisation are worthwhile goals, and important for the development of international markets, but the interests of an individual country must come first. **AST**

Jo Van de Velde
Global head of product management
Euroclear



Natural selection

It's a Darwinian world out there in the financial services industry, but MYRIAD's Rupert Booth says that with the right evolution firms can get 10 times the functionality at a fraction of the price

There can be no doubt that the major industry conferences this year have cast in to sharp relief the need for self-examination among financial institutions of every size and flavour. Even though the headline of this piece is a little tongue in cheek, it is nonetheless an accurate representation of the Darwinian premise of survival of the fittest—the fittest, in this context, being those who make the right choices at the right times, and avoid the fines.

NeMa Athens in particular saw due diligence emerge as the hot topic, defining it as an industry imperative among the tough new regulations, recommendations and procedural developments that have sought to bring the industry to heel. Responsibility for the outright protection of client interests and accountability for any operational failings is not only the preserve of the compliance and risk departments, it has now become a broad discipline that takes significant contributions from all corners of operations, from client onboarding to network management and beyond.

Participants in the financial industry are pulling out all the stops to comply with new rules and regulations; large sums are being spent and hundreds of staff are being re-tasked to get the job done. But questions remain. Has there been sufficient provision made for the future? Can we anticipate persistent technological solutions that integrate processes and bring to bear sophisticated workflow in order to achieve complex goals? For the most part, probably not, as there is much manual processing still evident in the industry.

Investing so heavily in staying on-side with external legislation and internal compliance has seen budgets swallowed whole by third-party consultants and external contractors alike, many of whom are former staff. That they rarely generate a 'solution' is money down the drain. This has meant, in many cases, that old technology and accompanying methodologies have remained in place, still disjointed and disparate, and under constant need of repair.

The short-term and tactical fix seems to prevail all too often over the long-term and strategic solution—and usually at significant additional long-term cost.

The process of onboarding a client within a financial company requires similarly rigorous due diligence procedures as that of managing an agent network, and being at the sharp end of ensuring both revenue generation and asset security, it is of paramount importance. Regulatory questionnaires including anti-money laundering, know-your-client, the Foreign Account Tax Compliance Act, the Markets in Financial Instruments Directive, and more, must be processed for any new clients, new products or new jurisdictions added, and for those already on the books. Multiple-source reference data has to be gathered, stored, applied and maintained. Regulatory requirements must be strenuously observed; process, data persistence and consistency sustained; and ultimately, the client's satisfaction maintained.

A simple, scalable solution will provide a single database where all client data can be captured, viewed and maintained, all documentation can be completed by all concerned—including the clients themselves—and all of this can be done securely, in an online platform.

Value is also added by tracking the status and flow of the onboarding process while automating requests for information from other departments. With the scoring of the process for risk assessment and the sequential auditing of every move made on the system, it is a recipe for a seamless, properly managed function.

A tool such as this is invaluable, providing transparency, integration, constant alerts to action, extensive reporting functions and the potential to incorporate legacy processes. Put simply, a cost-effective solution to reduce the time taken to onboard a client enhances the client experience, improves time-to-revenue and sets up ongoing due diligence, status reports and future client lifecycle management.

Network and vendor management can be catered for in the same holistic fashion, employing all the features mentioned above to manage the network and vendor functions from beginning to end.

Those departments are positioned to service the client at the far end of the value chain, creating a causal link between the client being onboarded and the one ultimately serviced by the agent network.

Many have tried and failed over a long period of time, and at great expense, to develop in-house solutions that do what off-the-shelf platforms can do at a fraction of the price. Getting 10 times the functionality at one tenth of the price is a compelling business case.

So how can they keep their clients happy, reduce reputational risk and keep the regulators satisfied? MYRIAD Group Technologies Limited offers a network management platform, MYRIAD, and—through its subsidiary company MYRIAD Embus Limited—a client onboarding solution, Embus. This type of innovative technology is readily available, it is robust and it has a proven track record. As our solutions evolve to meet the needs of the industry, we very much hope to be part of the process of natural selection, helping clients to stay ahead of the game. **AST**

Rupert Booth
Business development
MYRIAD Group Technologies

To me, to UCITS

New fund regulations are emerging across Asia, and Standard Chartered Bank's Peter Nagle believes that investment managers should look to Europe for examples to follow, pitfalls to avoid and lessons to be learned

Our clients often ask us what the implications of new legislations are for the fund servicing industry across Asia.

The European fund industry experience over the past 30 years may serve as a guide, giving an indication as to future opportunities and indeed some pitfalls to avoid.

In 1985, UCITS I was introduced by the European Commission in an attempt to create a well-regulated investment vehicle for retail investors. Upon authorisation by one EU regulator, a fund could be passported by the promoter into other EU countries without having to go through the extensive regulatory approval processes for each new EU market. It has since developed in to a remarkably successful enterprise, despite a slow start, with the fifth iteration of UCITS set to go live in March 2016 and consultation on the format of UCITS VI already underway. Another EU initiative, the recently launched Alternative Investment Fund Managers Directive, which is aimed at alternative funds, may, over time, replicate the success of UCITS.

There are a number of drivers for the continued development of UCITS:

- To deal with protectionist stances taken by various regulators, and to reduce regulatory arbitrage;
- To address genuine and practical operating issues of earlier versions;
- To widen the scope of the investment profile of UCITS and the generation of investment returns, assisted by lobbying from investment managers and investors. UCITS IV in particular greatly widened the investment scope, with perhaps the inadvertent consequence of attracting hedge fund managers to create UCITS with very sophisticated investment strategies. Indeed, one of the goals of UCITS VI is to deal with this situation; and
- To respond to the financial crisis, in particular the bankruptcy of Lehman Brothers and the Madoff fraud.

The UCITS brand is now recognised worldwide and easily distributed in a large number of non-EU markets; close to 40 percent of inflows into UCITS were sourced from Asian investors in recent years. Its success has encouraged Asian governments and regulators to replicate this model locally, leading to the introduction of the Association of Southeast Asian Nations Fund Passport (ASEANFP) in 2014 and the Asian Regional Funds Passport (ARFP), scheduled to be launched in September 2016.

But will these Asia fund passport initiatives be successful? And what can each learn from Europe's experiences? The ASEANFP went live in August 2014. It is an agreement between the Singapore, Thailand and Malaysia regulators to allow a fund authorised in one market to be passported for sale into the other two markets. It has, however, faced headwinds that have slowed its uptake. For example, there may be requirements for audits to be undertaken in each country in which the fund is sold, translation of constitutive fund documentation into local language, requirements for local transfer agency services, tax harmonisation, foreign currency restrictions, and capital controls. All of this translates in to significant costs for fund managers and promoters, and ultimately depresses the returns for investors in these funds. It is a piece of legislation that can be equated to the first iteration of UCITS.

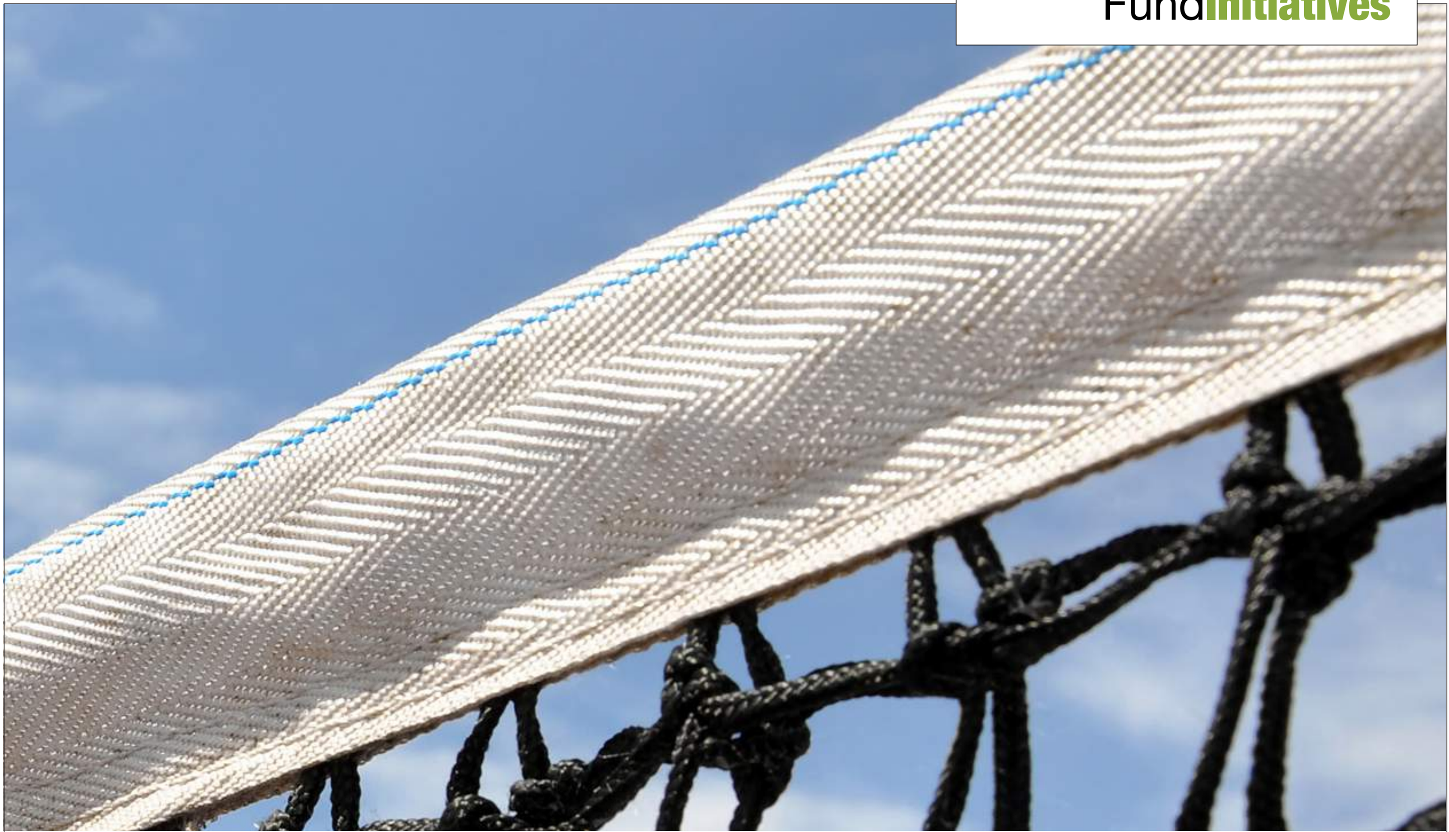
To date, a number of regional managers, notably Maybank Asset Management in Malaysia, have launched funds under the ASEANFP, and regulators are allowing managers to distribute their product into other countries.

While the ASEANFP has yet to gather sufficient traction to be considered a success, it has the potential to assist Malaysia in further developing its credentials in servicing Shariah-compliant funds.

The second Asian initiative, the ARFP, has the potential to be a significant success as it is modelled on the very successful UCITS III. That was very much focused on retail investors and dealt successfully with the initial teething problems of the earlier versions of UCITS regulations. UCITS III created the platform for the UCITS product to 'go global'. The initial countries leading ARFP are Singapore, South Korea, Australia and New Zealand, the Philippines and Thailand, and membership for the initiative is open to all the economies in the Asia-Pacific Economic Cooperation (APEC).

However, in order for ARFP to be truly effective, there needs to be commonality of tax treatment across the various markets. In this regard, Australia has undertaken recent positive changes to its tax laws.

ARFP is potentially a serious challenge to international managers who today actively distribute their UCITS products into the Asian region. Besides being modelled on UCITS III, ARFP is also likely to be more attractive to the international manager as it has a greater pool of money than that available in the ASEANFP markets.



The fund market in Asia for retail investors is currently split between strong local managers, some regional managers and the distribution of UCITS funds.

The creation of a wider market with scale may encourage larger international managers to consider creating funds domiciled in the region. It is worth noting that Singapore and Thailand are participating in both ARFP and the ASEANFP initiatives.

There are other initiatives that impact the Asian fund industry. Know-your-client, anti-money laundering, and the Foreign Account Tax Compliance Act requirements will have a significant impact on current distribution operating models. Fund managers are increasingly looking to their service providers to assist with these requirements. Going forward, engaging with an international service provider with a local footprint will be very important for managers.

Demand for more sophisticated investment products is likely to provide a challenge for managers, service providers and regulators, as they try to develop the necessary experience and understanding to manage and oversee the inherent risks in such products.

The other substantive change in the regulatory scene in Asia is the Mutual Fund Recognition initiative launched in July. This enables Hong Kong and mainland Chinese managers to distribute locally domiciled funds into both markets. Given the size of the Chinese market relative to ASEANFP and ARFP, this is an attractive proposition to fund managers, if they can overcome the distribution challenges in mainland China.

A move to widen the scope of mutual recognition to include APEC countries would be very attractive and create a genuine alternative to UCITS. Recent turmoil in the Chinese equity markets is unlikely to affect continued investment by the Chinese into the stock markets over the medium term. However, it is likely that a substantial number of retail investors in China will look to diversify investments out of the Chinese market and also to appoint professional managers to look after funds on their behalf.

Investment management firms will need to utilise securities services providers in the region that are well established in target markets and have the experience and system capabilities to help navigate the ever-changing regulatory landscape.

Given that all of the ASEAN countries are a part of APEC and therefore eligible to participate in ARFP, perhaps the two initiatives can be integrated. There is also the question of whether China will take the opportunity to lead in this area by quickly widening the scope of mutual recognition to other markets in Asia, in addition to Hong Kong.

A passport regime requires scale if it is to work. This helps to reduce costs and ultimately leads to higher returns to attract further assets. The demographic drivers in the region, such as the pension time bomb and a historically low allocation of wealth into securities, will drive monies in to fund structures over time, as we have seen elsewhere. However, a move to attract back at least some of the money currently invested in UCITS could help kick start growth in a meaningful way, and quickly.

One way to achieve this could be for Asian regulators to seek reciprocity with the EU and allow ASEANFP and ARFP to be distributed into Europe in a similar fashion as to how UCITS can be distributed in Asia today. In the absence of such an agreement, Asian regulators could potentially prohibit the distribution of UCITS products into their respective markets and so put pressure on international managers to create domiciled funds in Asia in order to retain client assets.

We expect new iterations of Asian fund passport schemes to be issued over time as regulators adapt to changing demands and increase their comfort level. New jurisdictions are also likely to join the party.

With close to $4 trillion already in Asian funds, higher growth rates in the region, and an expanding middle class with increasing disposable income, the future is bright for the fund management industry in Asia. **AST**

Peter Nagle
Head of trustee and fiduciary services
Standard Chartered Bank

strate
South Africa's Central Securities Depository

Strate ahead

Strate could be a step in the right direction for post-trade processes

South Africa's financial markets continue to be rated among the best in the world, with Strate at the helm in the post-trade environment. For close to two decades, this central securities depository (CSD) has provided the local market with the highest operational standards, transparency and effective management of risk.

This is evident in the 2014-15 Global Competitiveness Index report, published by the World Economic Forum, which continues to show South Africa among the top 10 countries globally in terms of financial market development. Of the 144 countries rated, South Africa was ranked seventh for the financial market development pillar.

Within the post-trade environment, Strate continues to set the pace as a leader with its alignment to international best practices and innovation. It provides electronic settlement of equities, bonds and money market securities, and has recently introduced collateral management services.

The company offers numerous benefits to the market, such as:

- True simultaneous, final and irrevocable, delivery-versus-payment in central bank funds via the South African Reserve Bank;
- Settlement on a rolling contractual basis with on-market equities transactions guaranteed by the Johannesburg Stock Exchange;
- Zero settlement failure record for all on-market equities transactions;
- Efficient execution of corporate actions, which has effectively mitigated against claims in the market;
- High levels of dematerialisation for all securities;
- ISO 15022 messaging standards;
- The largest SWIFT infrastructure in Africa, and one of the top SWIFT users in the world;
- High levels of regulation and corporate governance;
- Comprehensive risk management frameworks and methodologies;
- Robust business continuity and disaster recovery facilities; and
- Increased investor protection through the introduction of segregated depository accounts that can be opened at the CSD in the name of the client.

From an international standards perspective, Strate has been recognised as one of the first financial market infrastructures (FMI) in the world to complete a self-assessment against the 24 principles for FMIs as set by the International Organization for Securities Commissions and the Committee on Payment and Settlement Systems.

Therefore, the appeal for local and international investors to utilise Strate's services cannot be overlooked, and when investing in South Africa, there is no doubt that one should never settle for anything less than Strate in post-trade environment.

The new normal

Gregory McDonald and Nick Clarke of GBST Capital Markets explore the changing face of operations in an increasingly risk-focused marketplace

Understanding risk, as any financial firm will tell you, is all about transparency. From market risk to credit or operational risk, a firm needs to have an enterprise-wide view of their precise exposures at any given moment.

Transparency is based not only on the amount and quality of information a firm has but also on its timeliness. Trading firms can't wait until their end-of-day batch processes have finished to gain a proper view of their risk profiles. They need high-quality risk-related information in real time.

The regulatory pressure to achieve transparency is also being very clearly felt. In an effort to reduce systemic risk at every level, regulators around the world have implemented a series of measures to encourage better risk management practices by trading firms, investors, brokers and trading venues.

Take, for instance, the regulatory emphasis on more exchange-like trading for over-the-counter instruments, as seen in the European Market Infrastructure Regulation and US Dodd-Frank Act rules. Or the implementation of CASS rules to segregate client money, the transition in the US to T+2, or even the so-called Volcker Rule that aims to prohibit banking firms from engaging in certain proprietary trading. These are all examples where a desire for greater transparency in a more timely fashion is changing the way trading firms do business.

However, pre-trade risk controls in many cases rely on post-trade information, so the more that middle- and back-office functions are able to speed up their processes, the greater the firm's ability to gain transparency and, by extension, manage and mitigate risks. That trend has resulted in a much greater emphasis on cutting-edge technology within middle- and back-office functions.

The best mechanism for achieving transparency is fast forwarding what happens within operations, and processing transactions after they occur much more quickly.

Embedded risk

One issue that faster post-trade processes can help firms grapple with is embedded risk. This occurs when a broker-dealer executes a trade for a particular party, and that client in turn is buying or selling on behalf of other parties, each of whom may have a different risk profile.

The broker-dealer will therefore not be aware, intra-day, of what kind of embedded risks it is taking on. However, GBST, through its Syn~ family of products, allows users to form this consolidated view of a firm's overall trading positions in real time.

While regulatory change can be time-consuming and resource-intensive for many firms, there also may be an upside to the process. As regulators aim to mitigate credit exposures between broker-dealers and clients, the result is better client service. On balance, what's happening is they are forcing more rapid communication between brokers and clients.

Multi-jurisdictional

Where the idea of gaining real-time transparency gets tricky, however, is when trading starts to take place in multiple locations, each of which may have different regulatory regimes.

GBST is looking to provide a consolidation mechanism to firms with global positions, as well as the settlement status of those positions from different regions. There might be many underlying systems in use in different regions, and that may be because there is local connectivity into the market infrastructure.

In other words, a broker-dealer transacting with a global fund may be taking on embedded risk with clients from all over the world at any given time. For instance, a market may be settling in a distant part of the globe and that means securities may need to be borrowed to meet a position. A system that can escalate those and other kinds of risk-related issues to regional, global and functional operations managers becomes vital, ensuring that all the right people can see the information they need to in a timely fashion.

The regulatory focus on transparency shows no sign of abating, and that leads to operations managers thinking about risk differently. From a practical perspective, the operations managers are now the ones who, in a lot of ways, are managing some of the key risks for the firm.

The new normal

For those risks to be managed effectively, transparency needs to become more than just a goal; it needs to be automated and built into a firm's workflow.

Systems need to be able to escalate issues or risks on a global basis to an operations manager, and then apply rules to aspects of the operation. That could mean the ability to apply limits or authorisation points on the fly. Or, if there's a regulatory change, it could mean altering the system to capture new types of trades within a post-trade process.

Systems also need to be flexible enough to accommodate manual intervention. Rules should be put in place within the workflow that help mitigate operational risk, 'fat finger' risk, or the risk somebody will push through a transaction that maybe shouldn't happen, for example, maker-checker controls.

Operations managers have long focused on technology as a means of gaining efficiency or putting in place more robust processes. But with this new emphasis on risk, they are increasingly looking at technology in terms of the transparency it can bring to the operation.

The trend is one-directional and in a lot of ways, it's the new normal from an operations perspective.

Whether this increased focus on real-time risk information is a result of regulatory pressure, competitive dynamics or the operational benefits that technological progress can bring, it means that operations managers now face a very different world compared to only a few years ago. It's a world that creates both challenges and business opportunities as financial firms look to gain real-time insight into their trading positions. In other words, meeting those challenges and seizing those opportunities is what the 'new normal' is all about. **AST**

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Dark matters

Turquoise's Robert Barnes suggests that the answer to more efficient trading functions in Europe could lie in the differences between light and dark

Trading of stocks can take place on either an exchange or via multilateral trading facility (MTF). While the exchange remains the listing venue for corporates, trading can happen on either venue. Turquoise is an MTF, a trading platform majority-owned by London Stock Exchange Group, in partnership with users. It allows the trading of thousands of equities and exchange-traded funds (ETF) from 18 European countries, through a single connection.

The system differs from London Stock Exchange and Borsa Italiana; each of these operates a primary market, on which companies can list securities, and a secondary market, on which investors can trade these securities via respective UK and Italian lit order books. Turquoise, however, is designed for trading a wider European stock universe—including UK and Italian stocks—offering a choice of 'lit' or 'dark' order books.

While many people understand the concept of 'lit' order books, which show the price and size of orders available to trade, an increasing number of investors are now discovering how to access order books using complementary trading mechanisms called 'dark pools'. The term refers to an electronic order book where the price and size of an order is not displayed to the market before the trade. After a match, however, the trade is reported to the public domain.

Order book prices offer a good proxy for prices of shares listed on European exchanges, and if post-trade data offers dark as well as lit real-time prices, the result is a more accurate portrayal of the market. In an automated world, post-trade transparency enhances pre-trade transparency for the next trade.

Consider the analogy of buying a house. The real estate agent might provide a 'pre-trade' price, but it also helps to know the actual price of the house next door 'post-trade' before making an offer to buy or sell the house.

Dark pools complement lit order books as an extra knob on the dial that helps investors to get their business done; dark pools match approximately 10 percent of all order book trading of UK and European shares. While lit order books conform to an agreed regime on tick sizes—the increments by which prices rise and fall—dark pools can match at midpoint. This means a participant can place orders inside the tick and midway between the best bid and best offer price available on the primary exchange.

Investors that use dark pools could therefore benefit from potential price improvement, meaning better investment performance. Like any tool, however, it is important to understand how each works.

Modern equity investor trends include global passive indexation and the desire to outperform benchmarks by trading block liquidity, increasingly in mid and small caps, diversified by geography. The bigger prize of block trading is to match size at a price, while avoiding market impact. As buy-side dealers often explain, there are a number of channels through which they may direct an order.

Channel one might be the high-touch sales trader, channel two might be the algorithmic smart order router, slicing up and dicing small sizes into multiple order books. But there is a new channel appearing, the anonymous order book mechanism that can rest larger orders until finding another side to match in block size, without informing the market until after the trade.

There is a call for innovation. While the Turquoise Lit order book is a market for price, the Turquoise Midpoint dark order book is a market with a priority of size, and specialist functions.

Turquoise Uncross allows buyers and sellers to rest anonymously with potential to match at a time determined by randomised functions. The key feature here, in addition to size priority, is the randomised function. Having a series of auction uncrossings with a randomised feature means the likelihood of matching at a fair price is higher.

LiquidMetrix, the independent analytics firm that specialises in venue performance metrics, repeatedly reviewed transaction data of European dark pools, and confirmed that participants could benefit from placing larger orders in a function like this for longer, and many firms are opting for this functionality.

The order book mechanism mitigates the natural electronic trend of shrinking trade size. If the average trade size within midpoint trading is approximately €10,000 per trade, the average size for trades matched in an order book mechanism like Turquoise Uncross would likely be double that at €20,000.

Turquoise's Block Discovery function facilitates larger block orders by matching undisclosed block indications and interacting with existing liquidity in the Turquoise Uncross mechanism.

The result is a working order book mechanism that serves investors wishing to trade larger blocks in blue chips or mid- and small-cap stocks, plus the operational benefits of straight-through processing associated with traditional order book trades.

When facilitated in this way, it is estimated that the average trade size could be even higher, reaching €200,000, or 20 times the average midpoint trade size.

There are also several single trade examples that exceed €1 million, and many are above the European Securities and Market Authority's large-in-scale threshold. However, Turquoise is also ready to fulfil the needs of long-term investors, and Turquoise Uncross and Turquoise Block Discovery are just the beginning. **AST**

Robert Barnes
CEO
Turquoise

Africa calling

With market infrastructures developing in leaps and bounds, Mark Kerns of Standard Bank says Africa's doors are opening up to international investment

Although the allocation to Africa of globally invested funds is less than 1 percent of the total, market developments over recent years indicate that this will increase and present a major avenue for capital markets growth, when combined with developments at a domestic market level throughout the region. As the demand for African assets intensifies, even greater focus is being placed on the protection of assets to mitigate risk in line with global market practice. In addition, there is concern over whether Africa can cope with the demand for assets to invest in, and provide the asset servicing solutions required by institutional investors.

Africa is ready to meet the opportunity. There does, however, need to be political and institutional drive to maintain the regional focus on market infrastructure improvements that will retain and attract the billions of dollars of foreign investment looking for African assets.

According to the African Economic Outlook Report by the African Development Bank, the Organisation for Economic Co-operation and Development (OECD) and the United Nations Development Programme (UNDP) in 2014, external financial flows have quadrupled since 2000. Yet liquidity across the continent remains a challenge, as we are seeing a lot of money chasing too few assets. A number of markets are taking steps in the right direction, however, and there have been major improvements over the last three years that need to be celebrated and replicated.

South Africa's capital market, which benefits from sophisticated market infrastructure and a highly advanced financial services industry, now equates to more than 150 percent of GDP. A significant gap with the rest of the continent has opened up. In Nigeria, the capital market makes up just over 24 percent of GDP, and in Kenya it is around 60 percent. This is where the opportunity and potential lies, as these countries, and others, respond and begin expanding their markets.

It is important to point out that while growth in capital markets cannot, and should not, be directly correlated to GDP growth—economic growth in Africa will increasingly take place at different rates depending on the variable dynamics of each country—constant growth produces a larger economic base, which is good for the asset management industry.

The growing interest from investors can be understood when you consider that the International Monetary Fund's (IMF) recent Regional Economic Outlook for sub-Saharan Africa projected that the economy of the region is set to register another year of solid performance, expanding by 4.5 percent in 2015. While this rate will be at the lower end of the range experienced over the last few years, sub-Saharan Africa will remain among the fastest-growing regions of the world.

The composition of financial flows has also changed progressively with foreign investments and remittances from non-OECD countries underpinning this positive trend. Foreign investment—direct and portfolio—has now fully recovered from the economic crisis and hovers around $80 billion, making it the largest financial flow to Africa.

We are now seeing a variety of African investment products at a domestic and global level. These include domestic and regional collective investment funds, exchange-traded funds, depository receipts and private equity vehicles, as well as ongoing demand for government and corporate debt. The inclusion of selected African markets and asset classes in global or regional indices is also increasing allocation to the continent. The regional challenge is meeting investment demand and, in turn, improving liquidity, given domestic and global institutional demand as well as that of individual investors. Specific country and market risk can still be a concern based on the functioning of the local credit market, execution venue and overall market infrastructure, but these and other criteria form part of the investment decision.

According to the IMF, region-specific risks are also real, with security-related risks recently coming to the forefront in a number of countries. Should these risks escalate, they would generate serious fiscal costs, hamper growth, and deter domestic and foreign investors.

Exchange rate risks are on the rise with investors becoming concerned that their money will be subject to prolonged currency weakness. Oil exporting countries have had to navigate a much weaker oil price amid a lack of economic diversification, which has held back their ability to further develop their capital markets. Angola, for example, does not have a developed equity market, its government bond market is constrained, it has a shortage of foreign participation, and there is a lack of currency liquidity.

The global environment is highly focused on compliance and this is very relevant to Africa, too. High levels of controls are absolutely critical. Property rights and ownership laws have also evolved to provide further clarity on asset ownership, although many jurisdictions still need to make further improvements.

While there may be challenges, the opportunity is clearly there to see. As a result, the development of asset servicing in Africa is becoming far more pronounced, more solutions orientated, and integral to the functioning of markets.

Standard Bank's investor services business is currently active in 15 countries and we are hoping to add Angola by the end of year. Further market and product growth is planned in the years to follow. The wide range of solutions include custody, trustee services, issuer services, securities lending, derivatives clearing, accounting, compliance monitoring and performance measurement. These are the services that are going to be essential to the overall development of these markets, as well as assisting domestic, regional and global investors in structuring asset servicing solutions based on their specific requirements. Custody is a key part of the regional growth story and, as the leading provider in the region, this has provided a strong foundation.

South Africa, Nigeria and Kenya are key markets for Standard Bank, but we have seen increased investor interest in many other countries, too. Major moves are taking place from a market infrastructure perspective that will open the doors for more investment interest. Uganda, for example, no longer has an open outcry system, as wide area network capability eliminates the need for dated trading models. In Tanzania, brokers no longer have to transact from a trading floor, and Kenya is reviewing foreign exchange derivatives trading.

Africa will continue to do more to attract capital from other emerging market suitors. A broader array of investments is needed, and must be supported by a sophisticated and reliable market infrastructure. A progressive, rather than a big bang, approach to market development is the best route to take and we are seeing success from countries that take this approach.

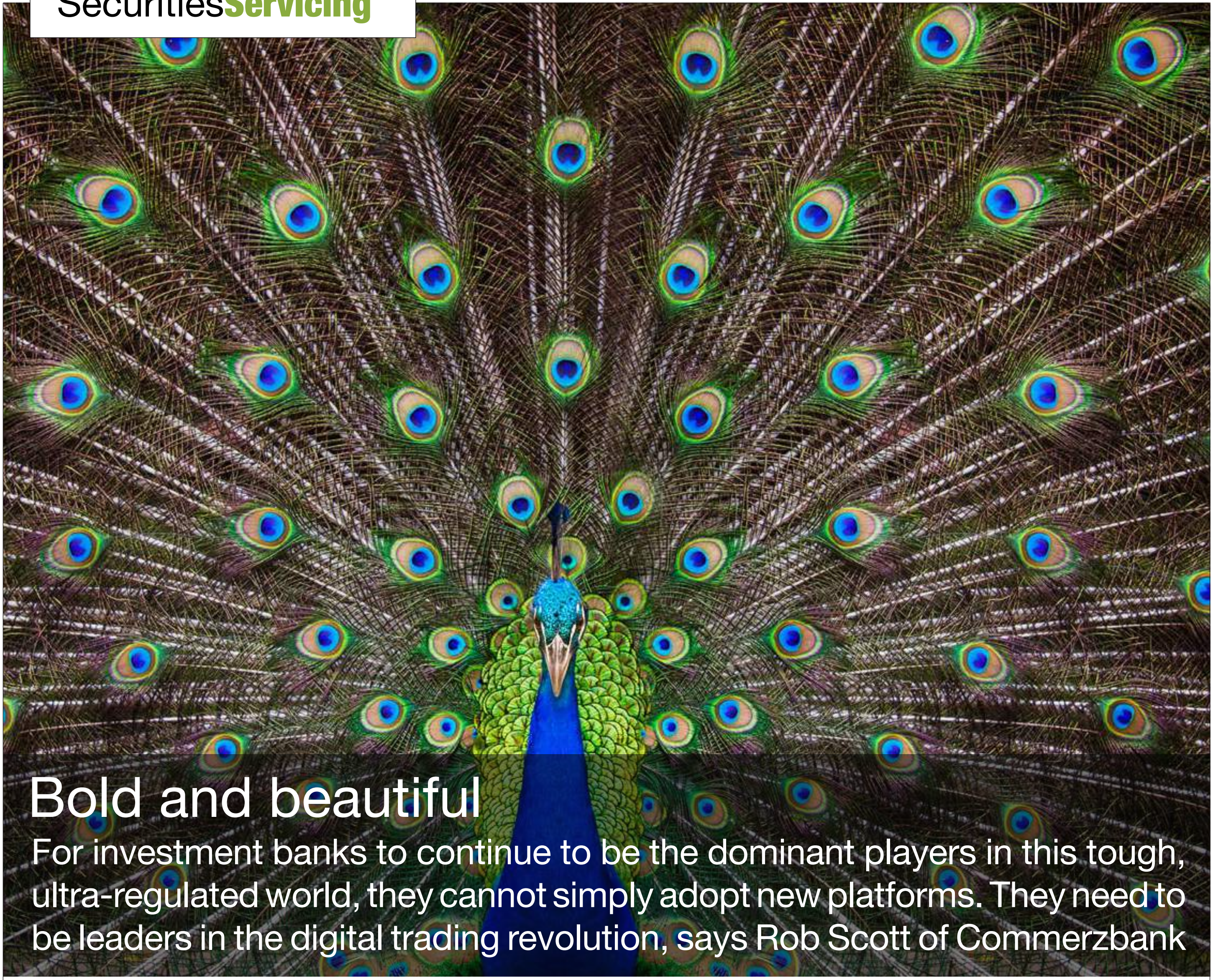
Ghana, for example, has been very progressive in terms of developing its market. A targeted number of listings within a certain timeframe set the tone, with the promotion of initial public offerings, exchange-traded funds and corporate debt issuance, all the while maintaining demand for government bond issuance. This has attracted international investors and provided greater asset diversification and liquidity for an expanding domestic market inclusive of a growing pensions sector.

Different markets are at different phases of the curve. It is noteworthy that Africa Investor, for example, recently rated Egypt's exchange as the most innovative on the continent. South Africa clearly has very sophisticated offerings such as currency derivatives, swaps and single stock futures. Foreign participation on the Johannesburg Stock Exchange is significant and increasingly important as it indicates a willingness of foreigners to seek returns that match the levels of risk they are willing to take, but also offers an opportunity for Africa to tap in to international investment flows on an efficient basis. Development never stops and the recent launch of currency futures on rand/naira, shilling and kwacha pairs, for example, is increasingly relevant for institutions doing business in these countries.

Zambia, Zimbabwe, Botswana and a number of other countries may have smaller capital markets, but there are positive developments at a local level. In Zimbabwe, for example, the introduction of a new central securities depository and dematerialisation of equities has had a positive effect in terms of market efficiency, risk management and overall investor confidence.

Despite periodic challenges, the demand for Africa is expected to grow as international investors seek further diversification to emerging and frontier markets as part of their overall asset allocation and as they gain further comfort in local market infrastructures, regulatory frameworks and, ultimately, in underlying asset safety. This, supported by growing domestic insurance, pensions and savings markets, will lead to deeper capital markets in terms of asset availability, asset type and underlying liquidity. While further structural development is still needed, the progress across the region has been significant over the last 10 years and looks set to continue, with initiatives that are already in progress and others being evaluated. The future looks bright. **AST**

Mark Kerns
Head of investor services
Standard Bank



Bold and beautiful

For investment banks to continue to be the dominant players in this tough, ultra-regulated world, they cannot simply adopt new platforms. They need to be leaders in the digital trading revolution, says Rob Scott of Commerzbank

For two decades, scale at all costs was the over-arching mantra of the securities servicing industry. More clients, more volume, and more and more capabilities were seen as the way to outpace the competition. Margins may have been narrowing, but with an explosion of activity across almost every asset class, it seemed like revenues could hold up.

Post-crisis—and with volumes falling away sharply—the flaw in that model was quickly apparent. But with other issues such as regulatory overhaul, business conduct and cost-cutting taking priority in boardrooms, few banks have had the resources or focus to address it.

As a result, while technology has transformed other industries at break-neck speed, many of the big banks have been firmly behind the curve, struggling on with proprietary securities platforms that were built, on average, 19 to 25 years ago or more.

But that looks about to change. A tougher capital regime and unprecedented commercial pressures have forced the industry to a tipping point. As a result, some transformative changes are happening—or set to happen—in trading businesses of the major banks. Here are four to watch out for.

From offshoring to outsourcing

Pre- and post-crisis, banks have saved literally hundreds of millions on their core operational costs by migrating people, processes and systems to low-cost centres such as India. By moving various commoditised processes offshore, firms have been able to drive typically 20 to 25 percent efficiency per year. But while offshoring can create dramatic cost reductions in the early years, the fact that the same aged, bloated systems are in operation means long-term efficiency and cost reductions remain limited.

Banks are waking up to the fact that it's the systems and processes themselves that need a material overhaul. However, re-platforming is a daunting proposition. It is estimated to cost around €100 million to €150 million to re-build and integrate a new global securities platform for a mid-sized bank. With volumes slowing, margin pressure continuing and most available investments going towards servicing regulatory compliance, few banks are in a position where they have that money to spend.

Shareholders would also rather see banks focus on their core areas of proprietary expertise rather than devote scarce resources to IT infrastructure to support processes whereby they don't differentiate.

The only viable solution is to consider outsourcing all or parts of a bank's core processing. Historically, banks have tried to address re-platforming needs through joint ventures and open-source initiatives, usually with other banks. But the fact that banks are in competition with one another has largely led to their failure.

So now it's the global professional services firms that are stepping into the breach. Accenture, IBM, HP and Wipro, among others, have been bringing their vast experience of creating business process outsourcing models across multiple sectors. For banks, they're beginning to prove the ideal partner: firstly, by not being direct competitors; and secondly, in terms of the

global resources and financial strength that put their balance sheets and core profitability ahead of most of the banks that are hiring them.

The past two years have seen major partnerships being forged to, for example, outsource the whole of one bank's post-trade processing, consolidate multiple trading platforms or deliver a private cloud platform in order to standardise systems and reduce operating costs. Such initiatives are anticipated to deliver up to 40 percent in savings in a service provider's underlying cost-base, by creating more bandwidth and allowing banks to operate with smaller, highly efficient and nimble teams.

As the first of the top-tier investment banks adopt these leading-edge technologies, other players can't afford to be left behind.

Centralisation

In the past, individual business units have tended to have their own IT departments, trading systems and preferred service providers, allowing a mismatch of hundreds of platforms, processes and service agreements to proliferate within one organisation.

In many markets, trading is now a very different beast as volumes have declined and an appetite for sophisticated, high-margin products has been replaced by preference for simpler, cheaper and centrally cleared products and solutions. Banks will be looking to create a far more unified solution to accommodate these simpler needs (particularly as more fixed income and currency activity moves towards the prevalent fee-based e-trading model used by equities). Whether this will lead us down the path to the "execution factories" anticipated by consultant McKinsey & Company in 2013 remains to be seen. But the trading organisational structure of most banks is set for a substantial overhaul and consolidation.

Greater focus

Universal banks with securities trading franchises have long considered it their role to be all things to all clients, but that no longer is the case. Franchises are set to become far more selective in whom they serve and what they offer. Top tier banks are now reviewing clients against tough criteria, from the importance of the relationship, to profitability, to the level of balance sheet that a client consumes.

Hard questions are also being asked about the businesses in which banks can afford to be active. We've seen big names dramatically reassess their activities, withdrawing from over-the-counter clearing and custody and exiting peripheral markets. This process will continue, allowing banks to set out their stall as leaders in core capabilities but also opening the way for newcomers and challengers to fill the gaps.

Pricing realism

For years the true cost of servicing clients has been obscured. To attract and retain business, particularly in Europe and the US, banks had to be willing to regularly renegotiate costs without adjusting service levels, and absorb the costs of non-standard services and customisation.

Under a more relaxed capital regime, it was possible to manage this state of affairs by cross-subsidising with revenues from other centres. But under the new regulatory and capital rules, every cost centre and/or location has to be able to stand on its own two feet.

Banks are now realistically examining their price structures and preparing to have more open and honest dialogue on costs with clients. While few have publicly bitten the bullet yet, we anticipate more transparency and granularity in costs, with firms starting to charge explicitly for services that were previously offered 'gratis', such as bank accounts, intra-day/overnight liquidity, non-standard reporting and collateral mobilisation. At the same time, we should start to see more open and honest dialogue with clients regarding the absolute cost of consumption of services.

From cost-cutting to new thinking

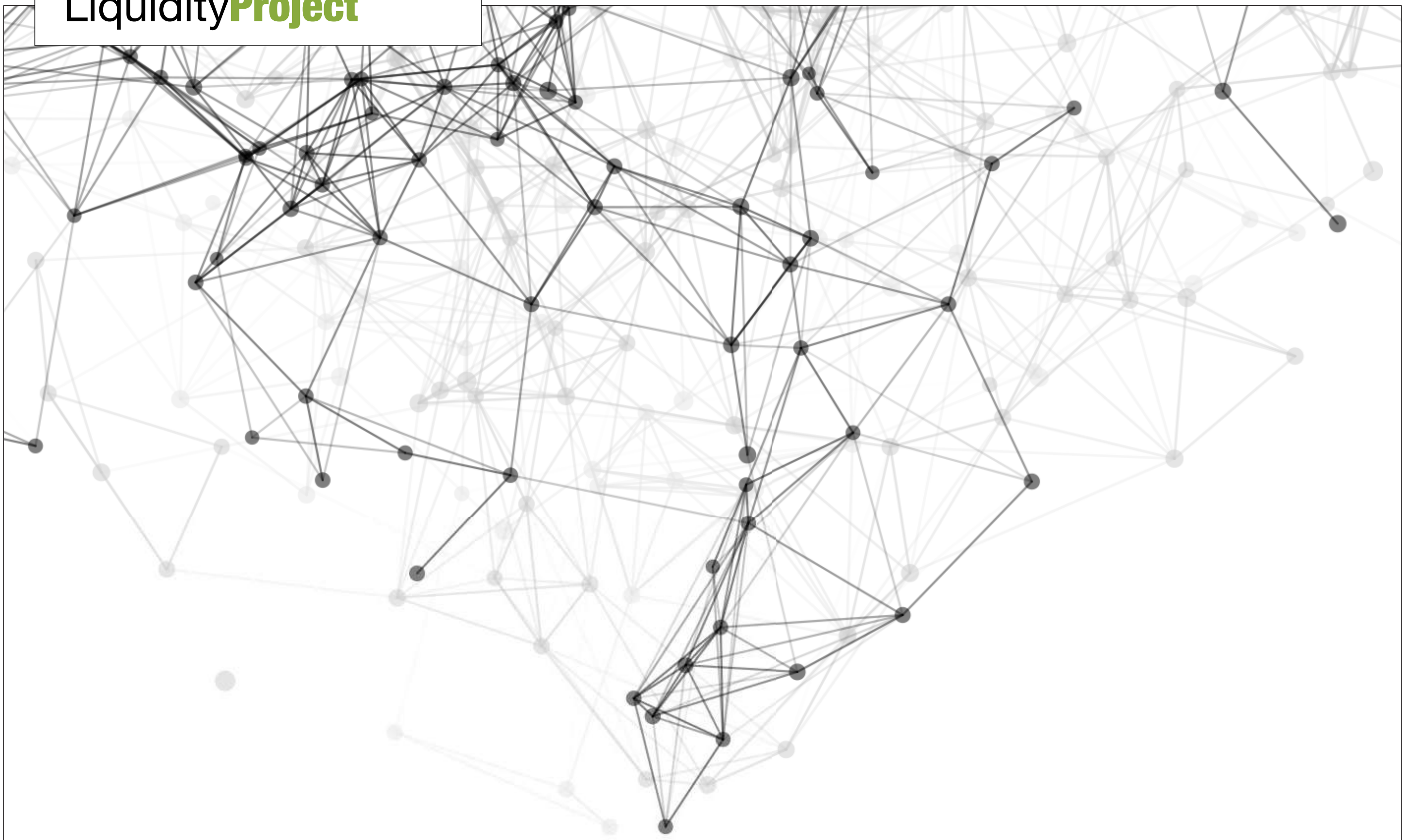
The hard truth is that six years after the credit crisis and a raft of cost-cutting and retrenchment, trading businesses are still generating returns well below their cost of capital—not simply because of falling volumes, but also the swingeing burden of new risk and conduct monitoring, reporting, and other regulatory demands.

Indeed, some commentators have suggested that even if trading levels were at the same boom levels as the pre-crisis years, the current cost of regulation and capital would still see firms struggling.

For investment banks to continue to be the dominant players in this tough, ultra-regulated world, they cannot simply adopt new platforms. They need to be leaders in the digital trading revolution. The mantra now has to be bold new thinking about financial technology that can transform a historically high fixed-cost business into a more variable, consumption-based model. **AST**

Rob Scott
Head of custody and collateral solutions
Commerzbank Corporates & Markets

> "The hard truth is that six years after the credit crisis and a raft of cost-cutting and retrenchment, trading businesses are still generating returns well below their cost of capital—not simply because of falling volumes, but also because of the swingeing burden of new risk and conduct monitoring, reporting, and other regulatory demands"



Collateral, capital and connectivity

Russia is building the infrastructure that will keep its markets liquid for years to come. National Securities Depository's Maria Langouche explains

STEPHANIE PALMER REPORTS

Collateral management is fairly new to the Russian market. Why is this coming about now?

Collateral management first appeared on the market about two years ago, but we were thinking about it for some time before that. Repo already existed in Russia, and it has been very successful. The difference is that, internationally, bond repo is an over-the-counter (OTC) product, and Russia is an exchange market. Like on many markets, our main liquidity provider is the central bank, so our main volumes of repo transactions come from repo or bilateral repo with the bank, through the exchange.

Two years ago NSD and the Central Bank introduced OTC repo, which was something of a revolution. The central bank is still the main source of liquidity, but there is a collateral basket, and after the global financial crisis, liquidity became quite precious. We have proposed not only overnight repo, but repo for three days, for seven days, even for months. The central bank is even thinking about repo for a year, which means promoting the term and finding a way to good collateral. We have looked at what international central securities depositories (ICSDs) such as Clearstream and Euroclear are doing and the equity they propose as standard, and we're adapting some of those products to suit our own system. We have ended up with a lot of the same features—we have market-to-market and automatic selection of securities and replacements.

There was a need for this service in the Russian market. We started with about 100 clients and now, after just two years, we have 214 clients, including banks, brokers and investment companies. Of the total volume of repo in the market, we already represent 32 percent of that.

What we have had to do, and what we are still doing, is create a bank of information, teaching market participants the benefits of collateral management. They have to adapt their systems and put in quite a lot of additional effort, so it's important that they understand the possibilities offered. The central bank has been very helpful in this, as it understands the international markets and the benefits of this kind of repo.

What do the new repo products mean for asset managers?

We work mainly with the banks, so asset managers are not our direct clientele, but we are certain that the facility will make the market more liquid and a lot safer. This is a difficult time in Russia—and everywhere—and when it comes to times of market stress, banks can find themselves in some difficulty. If money can be taken out of the banks in a way that is safe for the whole market, that will benefit everyone.

We hope that our efforts will also make the market more interesting, and we see this creation of a repo market as a first step, and a service that we intend to expand. We are planning to propose the same kind of repo with the central bank, offering collateral management to on-exchange transactions, too.

This will use the connectivity of the shareholders, including the Moscow Exchange, and allow us to include more and more participants in the process.

In the future, we are also thinking about introducing securities lending. Repo in Russia has two purposes: to avoid failure to deliver securities and to facilitate borrowing. Securities lending is only used for avoiding failure of delivering securities, so why not introduce a specific mechanism based on repo to help make the market even more liquid and even safer? We are working on that initiative, but it might not

come to light until 2016 or 2017. It will involve changing legislation and adapting our systems, plus a lot of work with the market community.

What are the benefits of developing a collateral management business from scratch?

We have learnt a lot from the experience. There is always a difficult choice: buying a system that already exists or developing it from scratch.

There are existing systems out there that allow securities lending and collateral management that could be extended to other products, because the technology is so perfect now that it can be easily applied to various platforms. We considered it carefully and decided that it would be more interesting for us to develop it ourselves.

Doing it this way adds an element of safety. Considering that we are still in the midst of a crisis, and there is still a question of possible sanctions, we have to remember that this service is a crucial element of the Russian infrastructure. It's like the circulation of blood—the liquidity that comes from the central bank is circulated around the other participants, and if it is stopped, there could be a crisis. We have to take responsibility for this.

Also, in the near future we expect to be able to offer our own solution to other countries, such as our colleagues in the Commonwealth of Independent States (CIS), who can learn from our experience.

We are happy that we chose to do it ourselves, but we are open to alliances. We have been in discussions with Clearstream and Euroclear about possible collaborations in the future, to join the ICSDs to create a link between our systems that could allow, for example, Russian participants to use euro bonds in the international environment, for collateralising Russian transactions, and vice versa.

How important is it for Russia to be in line with international standards for collateral management?

It is very important. Even with the political pressure on Russia, on the infrastructure side we must continue our work, and we want to make sure that everything we do corresponds to international standards. For example, if we start from the basics, in the financial industry everyone is using the ISO 15022 format applied for SWIFT communications, and this will soon upgrade to ISO 20022. Our collateral management project uses the same format, keeping up with international standards.

Secondly, we are using international documentation for repo transactions, which correspond to the International Capital Markets Association (ICMA) requirements. We are looking at what international regulatory organisations are proposing and what is being adopted by the international community, and we are also trying to have an open infrastructure that will allow us to be as technologically connected as possible.

How has NSD developed its relationships with Asian jurisdictions in the last 12 months?

We have had relationships in the Asian region, for example with Japan, Hong Kong, Korea and India, for a few years, but we have become more proactive in the last 12 months. A group of NSD representatives have been to Hong Kong with the central bank, and we are planning a trip to Shanghai to meet with end investors, regulators and infrastructure providers, and to try to understand how Russia can be more connected with the Asian market.

There is a commercial interest, but in our business, trust and a properly built relationship are the most important.

Consistency is important, too, and you have to make regular visits and always provide accurate information, and now we are seeing the first steps towards that practical development.

The Chinese CSD also visited NSD recently, and we have been in communication regarding the possibility of opening bilateral accounts. We are ready to fulfil our role here—we are just in the process of building the pipeline with China and Asia.

The Chinese market has been subject to some state intervention—do you anticipate that affecting your relationship? What about the economic and political landscape between Russia and Europe?

Representatives of NSD have visited China and the feedback we have had is that actually everyone is quite calm about the situation there. I am not a macro-economist, I am on the infrastructure side, but I would say that although the situation might appear worrying, China still has a lot of resources, so we will continue working with them for now. We will just have to wait and see.

Of course, we are not only working with China, we are also developing relationships with the CIS countries, including Azerbaijan and Kazakhstan, which are Asian regions as well. We are broadening the circle of participants that we would like to work with to include these regions.

We're like plumbers. We're responsible for the pipes and we have to maintain them. When there is interest again, we will have the right tools to allow proper circulation of capital through our systems. AST

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Maria Langouche
Vice president
National Settlement Depository