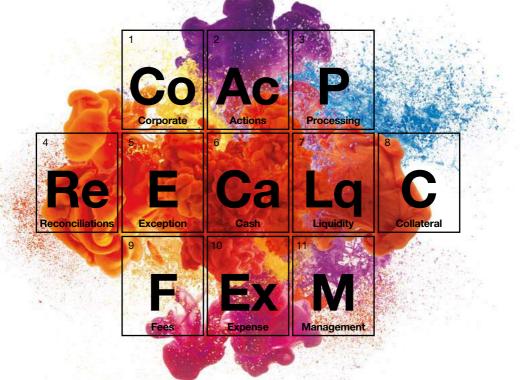
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Regulatory Handbook 2018

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Editor's Note

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www.assetservicingtimes.com Twitter: @ASTimes_

Acting Editor: Stephanie Palmer-Derrien stephaniepalmer@blackknightmedialtd.com +44 (0)203 750 6019

Deputy Editor: Becky Butcher beckybutcher@blackknightmedialtd.com +44 (0)203 750 6018

Reporter: Theo Andrew theoandrew@blackknightmedialtd.com +44 (0)203 750 6019

Editorial Assistant: Jenna Lomax jennalomax@blackknightmedialtd.com +44 (0)203 750 6018

Contributors: Drew Nicol and Barney Dixon

Designer: James Hickman jameshickman@blackknightmedialtd.com +44 (0)203 750 6021

Associate Publisher: Joe Farrell joefarrell@assetservicingtimes.com +44 (0)203 750 6027

Publisher: Justin Lawson justinlawson@assetservicingtimes.com +44 (0)203 750 6028

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Not all those who wander are, necessarily, lost

The regulatory landscape is not an easy one to wander. Different regulations pull firms down different paths at the same time, while authorities provide conflicting maps and each demands constant status reports.

An influx of new rules post-crisis saw firms seemingly surrounded on all sides, with regulatory demands competing with shrinking budgets and growing client needs. Now, the way ahead is a little clearer, but the story is much the same. We're certainly not out of the woods yet.

In the Asset Servicing Times Regulatory Handbook 2018, we consider some of the challenges that are ongoing or still to come, with industry experts discussing the Central Securities Depository Regulation, sanctions screening requirements, and the role of data in regulatory processes.

We also consider the implications of things like the EU's Capital Markets Union, the upcoming General Data Protection Regulation, and US President Donald Trump's continuing threats to repeal the Dodd-Frank Act.

Steps are being made in the right direction, but conversations in the industry remain largely the same. What is becoming clear, however, is that those involved are developing the confidence, and the products, to manage the challenges they're faced with.

The financial services industry isn't at the end of its journey just yet, but at least it's getting used to the road.

Stephanie Palmer-Derrien Acting editor Asset Servicing Times

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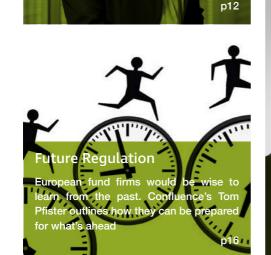
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Wheels of change



Although regulation brings challenge and uncertainty to the financial services industry, it does carry opportunities

Becky Butcher reports

One of the biggest regulatory talking points in the financial services industry in 2017 was the second Markets in Financial Instruments Directive (MiFID II).

Over the past year, firms have been preparing for MiFID II implementation on 3 January 2018, but many industry participants raised concerns about the scope of the changes and the uncertainty surrounding the directive, with some describing it as the biggest challenge of the year.

Part of EU legislation, MiFID II regulates firms that provide any services to clients linked to financial instruments and venues where these instruments are traded.

Michael Cooper, chief technology officer of Radianz, the global banking and financial services segment at BT, suggests that, while there is an element of variation between participants, most are "seeking to industrialise a development process that achieves compliance". He says: "For the most part, this is a 'sleevesrolled-up' approach — with increased automation of testing and validation, but constrained by the availability of talent and time."

He adds: "In an ideal world, the amount of regulatory change should drive reciprocal applications and systems development—and replacement with systems conforming to new architectures and design. However, the sheer volume of regulatory response is an inhibitor of more fundamental systems change and this is a dilemma that needs resolving."

This is a continuing issue. Following the 3 January MiFID II deadline, firms must spend 2018 looking at how they can improve their management of this, and other regulations.

Arzish Baaquie, head of UK at Smartkarma, explains: "Funds will have to run these processes in more efficient ways, using technology more effectively, carefully examining who is producing their research and how they are consuming it."

Other challenges, such as the UK's decision to leave the EU and the election of Donald

Most financial services firms have no option but to 'wait and watch' and hold off on any transition plans or major infrastructure changes for now

Trump as President of the US have also created regulatory uncertainties.

Brexit negotiations between the UK government and the EU are set to continue throughout 2018.

Companies will have to keep a close eye on this, monitoring any progress around the withdrawal process and associated implications, relocation plans and requirements.

The UK's departure from the EU will be yet "another puzzle that will need to be addressed in the coming year—to say nothing of possible Dodd Frank changes in the US", according to Cooper.

Also, according to Tony Freeman, executive director for industry relations at The Depository Trust & Clearing Corporation (DTCC), there are still significant question marks around the implementation of legal entity identifiers (LEIs), which are mandated under MiFID II, but are also a global initiative implemented by the G20.

DTCC is set to launch its Global LEI Foundationaccredited utility for same-day issuance of LEIs, for entities looking to meet deadlines as quickly as possible.

Freeman says: "There also appears to be a desire for consensus on an international level, with regulators trying to reconcile differing interpretations of the new trading rules which is a welcome development."

Bhawana Khurana, vice president of FS Client Solutions at The Smart Cube, adds that most financial services firms have no option but to 'wait and watch' and hold off on any transition plans or major infrastructure changes for now.

With no sign of regulation slowing down in 2018 and beyond, Wendy Phillis, head of governance and regulatory solutions for Europe and the Asia Pacific region at RBC Investor & Treasury Services, suggests that there are still large-scale programmes, like MiFID II, that will also require "fundamental changes" to the way firms operate.

The next big regulatory initiative in Europe is the Global Data Protection Regulation (GDPR), which comes into force in May. The primary focus for 2018 should be completing all existing projects and then working through quality assurance programmes to enhance completeness, accuracy and timeliness

GDPR replaces the Data Protection Directive 95/46/EC and has been designed to harmonise data privacy laws across Europe, to protect EU citizens' data privacy and to reshape the way organisations across the region approach data privacy.

In order to meet this deadline, Phillis suggests that firms will have to focus their attention on its implementation immediately after MiFID II.

She comments: "The GDPR requirements are broad and complex, and in my view, will set the standard for privacy regulation around the globe. As a result, I believe it would be prudent for companies to implement their North America and Asia Pacific analysis at the same time as their European efforts and analysis to ensure they are well-positioned for when similar regulation is rolled out in other jurisdictions after 2018."

As firms continue to adapt to the changing political and regulatory landscapes in 2018, Cooper believes that the single biggest challenge will be to comply with regulatory requirements and manage market structure change, while dealing with technology imperatives that will drive firm productivity and profitability.

Although GDPR is high on the agenda of financial services companies, Mahima Gupta, senior manager of regulatory response at Sapient Global Markets, says that Securities Financing Transaction Regulation (SFTR) is the next challenge for companies post-MiFID II.

SFTR, due to come into effect in 2019, requires firms to report transactions including repo trades to an approved EU trade repository.

Gupta explains: "This adds yet more complexity as it requires firms, established in the EU and non-EU branches, to report transactions to trade repositories, with the aim of increasing transparency in the securities financing market."

She suggests that the primary focus for 2018 should be completing all existing projects and then working through quality assurance programmes to enhance completeness, accuracy and timeliness of regulatory reports across all systems and departments responsible for providing data to reporting entities.



"In the middle of difficulty lies opportunity." – Albert Einstein

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Regulatory Overview

Globally, with no indication that there will be a slowdown in the level or cost of regulatory change, Phillis predicts that margins will continue to suffer, posing an increasing challenge for some firms, which may drive consolidation in the industry.

However, while the industry has faced many challenges in preparing for the implementation of various regulation, there is an argument that new regulations can bring opportunity.

Although 2018 sounds like it could play out in a similar way to 2017, in terms of regulation deadlines, Cooper notes that regulation is a driver of change–frequently with the intent of fundamentally changing the structure, operation and competitive landscape of markets.

Cooper suggests that the current regulatory landscape is no different and almost "inevitably introduces opportunity as a consequence". He comments: "Current regulatory change however offers a volume and intensity that will cause review of fundamental business strategies, supporting systems, processes and procedures. It is an opportunity for refresh, but also an opportunity for new entrants and new providers."

Increased scrutiny around regulation has led to a number of issues around traceability, operational overheads and organic development of infrastructure.

Paul Burleton, head of strategy, regulatory risk and compliance at GFT, suggests that this increased scrutiny has led firms to rethink their approach to implementing technology and process change—simply "bolting on" code, or hiring swathes of (offshore) analysts, clearly isn't sustainable from a cost or compliance point of view, he says.

"Increased automation opportunities and change in management approach that incorporates regulation at the start will yield benefits in terms of reducing cost and headcount, and importantly avoiding the major hits to the bottom line from regulatory fines, which have increased significantly since 2008."

Burleton says that GFT is increasingly working with regulatory technology firms to look at the automation opportunities for financial services in relation to complying with increased regulation in this area and introducing business efficiencies.

Financial technology is quickly developing within the regulatory industry and this is likely to continue into 2018 and beyond, potentially providing new opportunities for firms to think more strategically about implementing regulatory change going forward.

Khurana agrees that fintech and regtech provide a "potentially large growth area" for firms, where they can focus on data science and analytics with improved systems and regulatory reportings along with better management of operational risks.

She comments: "These regulatory uncertainties can open doors for opportunities for firms to change their traditional systems and move to more cost-effective and efficient reporting systems."

On the other hand, overhaul of regulation in the financial services industry can also bring about unintended consequences.

Phillis explains that, going back as far as the implementation of Basel II in the mid-2000s, there have been unintended consequences of regulatory change, which are expected to continue.

She says: "With broad and complex regulation such as Dodd-Frank in the US or MiFID II in Europe, it is almost impossible to avoid any unintended consequences."

However, she notes that it is important for industry practitioners to continue working

It is important for industry practitioners to continue working closely with regulators to educate them and provide feedback on new rules to ensure there is a clear understanding of how proposed changes will affect the industry in practice

closely with regulators to educate them and provide feedback on new rules to ensure there is a clear understanding of how proposed changes will affect the industry in practice.

Not all the unintended consequences have to be a negative. As a result of regulatory developments such as MiFID II and Dodd-Frank, various partnerships and collaborations have evolved between players to provide services to allow companies to meet certain requirements of regulation.

Gupta explains that the market is grabbing these opportunities by consolidating and forging partnerships. Analytics firms are partnering with research management platforms to provide a "full service" for research management, reporting solution providers are partnering with process automation firms to provide end-to-end data management and reporting services.

She says: "Regulators, who used to focus more on market monitoring, policies and directives, are feeling the pain of the market in meeting onerous requirements on an ongoing basis and are also wary of the potential over usage of technology by the market to address the pain."

Gupta adds: "They are thus facilitating the research and experiments in technology space to lead industry solutions and also to proactively gauge the impact of emerging technologies on the financial landscape."

For example, the European Securities Market Authority launched studies on blockchain and its application in regulatory reporting. The Financial Stability Board has recently researched and commented on how the use of artificial intelligence and machine learning for functions like trade execution could create issues around accountability.

According to Baaquie, one of the unintended consequences of regulatory developments will be an industry-wide shift, across all geographies, towards these new paradigms of transparency and accountability.

He states: "The wheels of positive change are turning, and we are certain the effects will be felt globally."

The rise of regtech



Asset managers can increasingly draw on technology innovation to help meet growing regulatory requirements. Wendy Phillis of RBC I&TS discusses whether risk-based screening and fine-tuned algorithms can mitigate complexities

As innovation in fintech continues to accelerate, financial services regulators, market participants and service providers are exploring how these new technologies may be used to help them keep pace with increasing regulatory complexities.

Regulatory technology is mostly focused on automating compliance obligations for financial services firms. While compliance solutions are not new, a growing abundance of market data and trading application programing interfaces (APIs) have produced fertile ground for pioneering software that can simplify how asset management firms can meet their regulatory obligations.

Morgan Self, managing director of Do Different, a UK-based management consultancy firm that works predominantly in the banking sector, says: "Increasingly, financial institutions are turning to technology to meet compliance demands, particularly with money laundering being such a high priority for regulatory bodies around the globe." He adds: "Regtech offers banks and financial institutions a vital means of keeping up with data-intensive regulatory frameworks."

Compliance focus

As regulatory measures become increasingly focused on data gathering and intensive modelling techniques, the administrative burden on compliance teams has increased in lock-step. While larger institutions often have the capacity to scale their operations, corporate compliance continues to be a significant hurdle for many asset management firms. If regulatory requirements are designed to avoid stifling market competition, they must adapt to the pace of financial innovation that technology is driving.

Lowering the barrier to market entry offers clear benefits to smaller firms. But, for more established players, regtech also provides opportunities such as streamlining processes to reduce labour and consultancy costs. Managing systemic risk effectively means striking the right balance of transparency and accountability without hindering market activity

Necessary balance

Asset managers may initially approach these tools with caution or reluctance.

In such a fast-evolving environment, they may opt to balance the expertise and familiarity of trusted service providers against the potential efficiencies of automated compliance solutions.

"The challenge is that what is available are tools, not solutions. And some of the tools are so sophisticated that only the largest, well-funded financial institutions can make best use of them," says Steve Goldstein, vice chairman of Opus Global, a US-based technology firm that provides compliance solutions to private equity and asset management firms.

"These new technologies need to become services that can be easily deployed before they'll be able to democratise and increase competition in markets."

Policy dialogue

For regulators, these software solutions may prove invaluable for protecting markets which are growing in complexity. Regulatory bodies and central banks, often hampered by challenging policy directions, are keen to establish a dialogue with the firms pioneering these technologies.

For example, the Australian Securities and Investments Commission holds regular innovation hubs, where it engages with regtech firms as well as other international regulatory bodies to discuss the latest developments and policy proposals. Managing systemic risk effectively means striking the right balance of transparency and accountability without hindering market activity.

"Both regulators and private firms are already coming together. Compliance costs for market players have skyrocketed over the past decade, which has led to growing demand for software that streamlines compliance processes and reduces costs," says Goldstein.

"At the same time, regulators are encouraging these technologies because they believe doing so will give them access to data that is more accurate, easier to analyse and can be used to reduce systemic risk."

Harnessing potential

Fintech is evolving to create a persistent state of disruption in the financial services industry. While market forces are experimenting with blockchain, robo-advisors and other emerging technologies, regtech is an approach aimed at better managing systemic risk through the automation of corporate compliance responsibilities and achieving greater levels of transparency.

These tools clearly have enormous potential, provided regulatory bodies, market participants and private technology firms co-operate and strike the right balance between accountability, accessibility, and innovation.

Innovation and oversight

Globally, regulatory bodies continue to introduce legislation requiring banks and financial institutions to reduce risk and increase transparency.

From the Capital Requirements Directive to the Directive on Payment Services (PSD) in the EU, these measures are being implemented as a means to limit systemic risk and foster sustainable growth.

While the objectives are clear and commendable, the cost of adhering to these increasingly complex frameworks is significant. As a result, it creates opportunities for new companies to emerge and potentially provide more costeffective solutions.

Fintech driven

Driven by the rise in fintech innovation, the burgeoning regtech sector may soon transform the discipline of corporate compliance. To explore how these tools may aid compliance teams, an important first step is to understand the regulatory constraints that are driving interest in this emerging field.

"For large institutions operating across multiple jurisdictions, anti-money laundering (AML) and know your customer (KYC) obligations can quickly spiral out of control," says Paul McCulloch, CEO of Helm Solutions, a regtech firm that has partnered with global regulators to automate cybersecurity and technology compliance.

McCulloch notes that some financial institutions allocate 40 percent of their overall IT budget to compliance.

With a high demand for AML/KYC solutions, online fraud prevention tools are one of the most competitive areas for regtech. Risk-based screening is achieved using algorithms that trawl through publicly available sanction lists, as well as thousands of government, regulatory and law enforcement watchlists. These tools are then capable of categorising individuals by risk level, and flagging disqualified directors or 'politically exposed persons' that may represent a possible fraud threat.

Stress tests

The development of programmable stress test simulators is another promising application of regtech. In North America, the implementation of the Dodd-Frank Act in the US requires stress test simulations to be performed on banks and large financial firms multiple times a year, by internal and external stakeholders.

Similarly, the Bank of England and the European Central Bank have also adopted mandatory

Regtech Update

stress tests resulting in additional opportunities for regtech to demonstrate added value by providing solutions that can produce simulations that are dynamic and accurate.

In Asia, the Monetary Authority of Singapore and the Association of Banks in Singapore have jointly developed a set of industry guidelines on the planning and execution of penetration testing (PT) of IT systems by financial institutions. Using these guidelines, 11 major financial institutions participated in a PT exercise, and the subsequent analysis was shared with market participants to raise awareness of the common and high-risk cybersecurity vulnerabilities.

"Creating better simulations requires better data to calibrate the inputs and parameters to the simulation," says Anthony Pereira, founder and CEO of Percentile, a fintech startup that provides on-demand stress test simulations. "We're storing more and more market data from many different sources, which allows us to generate complex scenarios and compute the output faster and more cost effectively than ever before."

Leveraging data

The abundance of data being made available by regtech firms is also being leveraged by publiclytraded companies. Automated shareholder disclosure systems have been designed to collate market data and present investors with real-time performance summaries. Similarly, real-time trading data is being used to produce more comprehensive risk reports, which is another area of focus for regtech firms.

"Using regtech to automate these disclosures enhances transparency and is beneficial to the market," explains Dag Lee, executive chairman of Nile, a UK-based financial services design consultancy. "These tools are providing both directors and external auditors with real-time data that can be used to improve business performance and better manage risk." For financial services providers that have global reach, compliance obligations need to align with requirements that vary across jurisdictions. With the introduction of certain regulations such as the second Markets in Financial Instruments Directive or the Packaged Retail and Insurancebased Investment Products (PRIIPs), the EU is seeking to address the lack of cross-border harmonisation.

"Some of these regulations are about better monitoring and reporting, and can conceivably be addressed by employing more compliance officers," Pereira explains. "But, other regulations are computationally intensive, and firms will have no option but to apply technology to meet the requirements."

Automated processes

With the future of corporate compliance set to be more data-intensive, startups will compete to provide services that can automate these processes and combine internal data with external information. Businesses are being called upon to streamline processes as regulatory bodies demand increasingly detailed reporting and greater levels of transparency. While these technologies are still in their infancy, firms that master them early may be the ones that establish a competitive advantage within increasingly competitive and regulated markets.

Wendy Phillis Managing director for governance and regulatory solutions in Europe and the Asia Pacific region RBC Investor & Treasury Services



The future's regulated



European fund firms would be wise to learn from the past, both locally and further afield. Confluence's Tom Pfister outlines how companies can be best prepared for what lies ahead

Stephanie Palmer-Derrien reports

Over the past few years, European fund firms have had to comply with hefty regulatory challenges—filing deadlines, sourcing new data points, increasing oversight, and adopting new technologies, to name a few. What lessons can we learn from them?

If there is one thing we can take away from the past few years, it is that data accuracy and consistency will take you a long way. In times like this, when the regulatory landscape is evolving so quickly, it is extremely important to prepare for the unknown. I can't say it enough—the key is to be flexible, scalable, and prepared for change.

It is no surprise that in Confluence's latest survey, published in November 2017, data consistency and accuracy was selected as the back-office challenge that concerns firms the most.

Getting your data house in order is paramount in the face of regulatory uncertainty, and 76 percent of respondents cited centralising data as key to meeting new regulatory demands.

The survey also highlighted that 83 percent of respondents expected fundamental changes to their operating models in the next 24 months. They identified regulatory change (63 percent) and technology innovation (52 percent) as key drivers of this transformation.

Both will require that asset managers have impeccable data governance in place.

They needed a way to supervise the market exposure of the largest portfolios in order to determine their economic impact in the case of major events

Often, firms don't have a large enough budget to prepare for regulatory change far in advance. When new regulations are mandated, it becomes a scramble to allocate necessary budget. It's a very reactive approach, which can cause firms to fall behind in preparedness. But, there is a better way to be prepared for the inevitability of new regulations.

By making an upfront investment in technology that includes a flexible and scalable data model allowing for data aggregation and re-use across forms, firms will be in a much better position to accommodate the data requirements of each new regulatory item. Rather than relying on individual systems for each regulatory mandate, having one system for all post-trade regulatory filings will tremendously reduce regulatory response time and help relieve cost pressure.

With the continuing changes, what is the next big regulation on the horizon?

Several European regulators have recently said fund firms should expect change in the near future. They haven't specified what, when or how it will happen, but it is clear that we should brace ourselves for new regulations and reporting rules.

In my opinion, we can expect some change around the monitoring of UCITS funds. Looking back a few years, we can see that after the economic crisis, the regulators broadened their scope and focus. They needed a way to supervise the market exposure of the largest portfolios in order to determine their economic impact in the case of major events, so they shifted their focus from improving investor

Future Regulation

protection to monitoring systemic risk and market inefficiencies.

In the US, the Securities and Exchange Commission (SEC) started requiring risk information for money market funds in 2010, with Form N-MFP, before turning to private fund systemic risk oversight in 2012, with the introduction of Form PF, and adding separatelymanaged accounts with a modification to Form ADV in 2017.

Form N-PORT for mutual funds is coming up in 2018.

The Commodity Futures Trading Commission added to the SEC Regulations in 2012, with Form CPO-PQR for commodity pools that were not mutual funds, and Form CTA-PR for other commodities trading, before introducing Form CPO-PQR filings for mutual funds in 2013.

In Europe, we had the Alternative Investment Fund Managers Directive in 2014 and shortly thereafter Solvency II.

The new Money Market Funds Directive is coming in 2019, so that leaves UCITS as the next logical target for broad and substantial data collection to facilitate data analysis and systemic risk monitoring.

What can firms do to prepare?

I don't think new regulations are necessarily bringing unknown challenges. Regulators talk to each other and, to a certain extent, coordinate their actions.

The European Securities and Markets Authority, for example, has always been in lockstep with the SEC.

They reference each other in directives and learn from each other's experiences.

By monitoring what is happening in other countries or jurisdictions, firms can prepare for what is on the horizon without feeling like they are being thrown into the unknown.

A good example of that is the Money Market Fund Reform.

In 2019, European regulators will require a new form of reporting for money market funds, following in the SEC's footsteps of post-crisis reform in the US.

Many of the lessons learned for US money market fund reporting and constant net asset value (NAV) management are transferable to the European theatre, except perhaps some of the new aspects around low-volatility NAV funds.

The best thing I can recommend is that firms prepare well in advance by leveraging technology such as Unity NXT Regulatory Reporting from Confluence, which was designed specifically to support the global post-trade regulatory landscape.

With a technology partner that has a depth of regulatory reporting experience and a solution that is scalable, flexible and aggregates and reuses data across forms, new regulations such as the impending European Money Market Reform, or something else yet unknown, need not be a cause for alarm.

Tom Pfister *Vi*ce president of global product strategy Confluence



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Andrew Bates T: + 353 1 6731704

Donnacha O'Connor T: + 353 1 6731729 andrew.bates@dilloneustace.ie donnacha.oconnor@dilloneustace.ie

Mark Thorne T: + 353 1 6731735 mark.thorne@dilloneustace.ie

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A block in the road



As firms strive to get the best from blockchain, so to do the rulemakers. Nasdaq's Johan Toll considers where this technology fits into the modern regulatory landscape

Blockchain, or distributed ledger technology (DLT), has attracted a tremendous amount of attention and resources over the last few years, and there have been many successful proof of concepts in financial services.

It is exciting to see the beginnings of a shift from technology validation mode with proof of concepts to a commercialisation mode with more tangible pilots and commitments for putting solutions into production. While some regulators openly encourage innovations like blockchain, which could make the markets fairer and safer, the technology presents significant challenges to the current regulatory framework. As a global financial technology company that operates exchanges and other regulated entities in several countries and provides technology that powers markets around the world, Nasdaq works with regulators in many capacities. We have noticed that regulators are welcoming education and engagement on blockchain and other financial technology developments. They are looking to ensure that blockchain and other disruptive applications adequately address regulatory mandates such as investor protection, transparency and promotion of fair and orderly markets. Like market participants, regulators are seeking technology solutions to address increasing amounts of data that need We have noticed that regulators are welcoming education and engagement on blockchain and other financial technology developments

to be collected, analysed and processed. In addition, they are encouraging experimentation by technology entrepreneurs through regulatory sandboxes, while moving cautiously before amending or adopting laws and regulations to address innovative business models.

On balance, we believe these regulatory trends are positive for the development of blockchain. Yet, it is also important to recognise that many of the innovative market structures and business models made possible by the technology were not contemplated when existing laws and regulations were written. That said, regulatory frameworks can adapt to technical and business innovation as long as regulatory mandates are addressed in key areas such as transfer of ownership and settlement finality.

Transfer of ownership

ESMA and the European Commission have acknowledged the uncertainty pertaining to the transfer of ownership of securities on a blockchain in various consultation documents. In most jurisdictions, the legal transfer of ownership of securities, including pledged collateral, from one account to another currently takes place through a registry at a central securities depository (CSD).

Blockchain Update

Technically, a registry for dematerialised financial assets could be established on a blockchain. Under this scenario, the issuer would maintain the responsibility to confirm the transactions when entered into the blockchain (the digital securities registry). There would be more transparency because participants would have access to real-time information on the identity of record holders of digital securities and the amount of securities held and transaction date. Moreover, there would be less of a need for intermediaries to hold securities, or interest in securities, on behalf of investors, as the blockchain itself is the main ledger and golden record of ownership information.

However, there is a need for proper recognition of the holdings and the disposition of the securities on the blockchain within the scope of the existing financial services law and regulation. Today, it is uncertain how existing securities laws and regulation would apply to such a registry. Conflict of law issues, including deciding which law governs the transfer of securities on the blockchain, would also benefit from further clarification from the regulators.

There is a precedent in the US, in the state of Delaware, for using a blockchain to transfer titles of dematerialised securities. However, this precedent is untested in the English and other European courts.

Settlement finality

The EU settlement finality directive (SFD), which entered into force in 1999, provides certain safeguards for participants. The SFD regulates designated systems used by participants such as banks, CSDs and central counterparties to transfer financial instruments and payments.

Currently, the delivery of cash in exchange for public securities takes two days. During that time, there is a risk that one trade counterparty could deliver, but the other one could become insolvent before fulfilling its obligations. Transactions on a blockchain could be executed and settled simultaneously, managing both the security and the cash in the same ledger. The terms and parties to the transaction could be recorded, and the title immediately transferred to the security. The blockchain system could act both as the record of the execution of the trade and the mechanism to transfer legal title.

Despite the accelerated settlement time, it is still possible for one counterparty to fail. One proposal for managing this is to deposit central bank money into the system, limiting exposure to commercial bank credit risk. Another is to require participants to deposit electronic money onto the blockchain system.

It may also be possible to develop a settlement coin that can be transferred via a blockchain to solve the cash payment issue. Ultimately, the SFD needs to be extended to preserve delivery versus payment and protect settlement finality when securities transactions happen on a blockchain.

Blockchain could improve many processes in the financial services industry, but it is still early days.

Some observers believe it will take a decade or more for the technology to become commonplace in the capital markets. The regulators can do their part by moving to reduce legal uncertainty.

Johan Toll Associate vice president and product manager for blockchain Vasdaq



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Waiting and CSD-ing

CSDR is coming, but it's too early to judge just how troublesome the measures may be, says Thomas Zeeb of SIX

Stephanie Palmer-Derrien reports

How have CSDs reacted to new demands under CSDR? What measures have they had to take, and what is still left to do?

The Central Securities Depository Regulation (CSDR) provides the final building block for regulation across the securities value chain.

As such, CSDR did not come as a surprise to CSDs. Since CSDs were regulated tightly under domestic law and international standards, and since CSDs performed their functions well during the financial crisis, the measures that CSDs have had to take as a result of CSDR have been limited.

The CSDR application deadline mid-September 2017 was a milestone to be reached.

It was a long preparation process for CSDs to put together the 'application dossier'.

CSDR has only just come into effect and certain provisions are yet to be enacted.

The coming months and the dialogue with the European Securities and Markets Authority (ESMA) will bring more clarity as to whether all CSDs and their regulators have the same understanding, and around where more needs to be done.

We should always keep in mind that, although CSDR has a national impact, the cross-border

perspective and impact is even more important, especially in terms of the 'one single capital market processing' in Europe.

Does CSDR pave the way for the Capital Markets Union?

A more harmonised approach to clearing and settlement is crucial to encourage crossborder flows.

While European stock exchanges embarked on consolidation in the wake of the introduction of the euro as the single currency, financial market infrastructure providers remain fragmented.

The establishment of a single settlement platform, Target2-Securities, has gone some way to addressing the local nature of settlement services.

CSDR continues these efforts, and may well help boost Europe's competitiveness through a stronger single market.

The CSDR settlement discipline regime (SDR) has been somewhat controversial. Has ESMA adequately addressed lingering concerns?

CSDR aims to harmonise SDR the EU. This may have a widespread effect on market participants.

However, at this point, the actual content and market impact of the settlement discipline regulatory technical standards are as yet unclear.

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ICMA has suggested that the proposed cash penalties for settlement failures are "too low to be effective". Do you agree?

As the penalty mechanism has not yet entered into force, we are not in a position to judge this statement at this point of time.

From our point of view, it makes sense to have ambitious cash penalties for settlement fails to avoid as many settlement fails as possible.

Equally, are mandatory buy-ins an effective form of governance?

Again, it is as yet too early to judge the effectiveness of buy-ins. However, we think that mandatory buy-ins should be the last step in the SDR and should only be applied if cash penalties do not fructify.

Additionally, a Europe-wide harmonised fail settlement regime is key to avoiding regulatory arbitrage among the different markets in Europe and thus is part of the level playing field.

Are the new rules under CSDR sustainable in the long term?

CSDR is one of the key regulations adopted in the aftermath of the financial crisis. It increases the safety and efficiency of securities settlement, harmonises the regulation of European settlement infrastructures and establishes the legal basis for a level playing field among CSDs.

Once all parts of CSDR are in force, we will see whether the various measures have a positive impact with regard to the stabilisation and security of the European financial market and, as such, whether it will be sustainable in the long term.

The planned review of CSDR will certainly be helpful in determining a sustainable legal framework for CSDs.

What will the market look like in five to ten years' time?

Financial market infrastructure providers driven by the growing importance of technology, decreasing margins, an envisaged level playing field for competition and evolving investor needs—are streamlining the operational processes and undertaking major reviews and upgrades of their systems.

Besides the regulatory adaptations, the main driver of the aforementioned developments are market participants that continue to suffer from high operational costs, rendering the search for alternative, cost-efficient options inevitable.

The aim of any effective financial market infrastructure provider should be to develop the right capabilities to solve real problems and create value and coherency across the entire market, for example, by seamlessly managing and communicating information, by optimising workflows that facilitate operational productivity or by leveraging relationships in order to provide investors with a truly end-toend processing chain.

It is essential that different financial market infrastructure providers work together and focus on investor needs while finding creative, streamlined, scalable solutions that can be leveraged across business lines.

> Thomas Zeeb Division CEO for securities services





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Know your data

Kelvin Dickenson of Opus discusses the company's new knowyour-customer platform and the challenges facing the industry

Theo Andrew reports

What are the challenges surrounding KYC in the market at the moment, and can technology make a difference?

There are lot of challenges around know-yourcustomer (KYC) rules. Firstly, the complexity of working in different jurisdictions, as well as the continued challenge of working with different data sets. Many of the more difficult challenges surrounding KYC are in trying to understand beneficial ownership of legal entities.

To leverage data in solving this, firms must develop a strategy and process to gather all the relevant data, organise it and finally, utilise it, and this is where technology can help. There is definitely technology available that makes the gathering of data much easier and much quicker, just by automating it. It also allows firms to deliver a consistent policy and compliant approach.

The emerging trend seems to be around taking that efficiency even further. We are looking at developing technology to help whittle down the data, eliminate irrelevant information and deliver a consolidated view of all the risk relevant content for the KYC and due diligence process.

Another way technology can be used is to gather more intelligent data. We are looking at the integration of different platforms and a better connection between the front office and the due diligence process. We want to develop a much better connection straight through to the back office, in order for clients to be managed with the right perspective.

Is collaboration important, in terms of moving forward with technology and new processes?

Absolutely, and there are two elements to that. Firstly, there is room for more collaboration and a more enterprising approach within banks themselves, so their activities and processes are not siloed. There is merit in building this around customer experience, rather than having individual tasks that need to be completed, which often overlap.

Secondly, there is a need for different technologies, often from different providers, to work more collaboratively.

We are launching a partnership with Fenergo, which is a great example of collaboration. They are undoubtedly a market leader in providing client lifecycle management solutions, typically installed behind a firewall, which is central to a bank managing its relationships with its clients, adding different dimensions, including storing and applying appropriate KYC rules.

What they don't focus on is aggregating the external information that is necessary in KYC and due diligence processes, and that's where our products really excel, so it made a lot of sense for us to collaborate.

Beyond our partnership with Fenergo, we also work to integrate technology on a case-by-case basis, integrating our platforms for clients to their specifications. Many of our clients have a platform they have built themselves, that we integrate with.

What are the main considerations when firms are operating between jurisdictions?

The main differences sit in regulation. There has been a lot more regulation requiring process in the EU. But, the US has just established the Financial Crimes Enforcement Network final rule for customer due dilligence, which makes many of the requirements similar. However, there are very important differences in the details. For example, in the US, certain types of trusts and not-for-profit entities are exempt from the beneficial ownership rule, but in the EU, beneficial ownership must still be verified. When you look at Australia and Asia, the regulations are different again. There are always going to be regional differences in beneficial ownership and due diligence compliance.

Looking forward, what are the main challenges companies will have to consider?

The most immediate challenge is how to understand ownership, and there are many emerging open sources that can help with that. National registers are becoming more robust, and we are working with several banks to optimise the use of business and ownership registries. Companies house is a great example, but there are several other countries in Europe that have business registries of a similar capability now, which is encouraging. We are working directly with a couple of clients to put the content together for them. There is a move in the industry to use much more opensource information, and we are enabling this by bringing multiple open sources together with the premium content that our users subscribe to.

Banks are going to have to plan for the pace of change. Having flexible technology and an agile policy group, to be able to adapt and change processes quickly, is going to be critical. We are also in an age of activist journalism, and we are much more connected as researchers. Everybody was shocked when the Panama Papers and the Paradise Papers were released, continuing to push the focus on tax avoidance and money laundering, and piercing the veil of corporate ownership. It's going to be a push to have processes to prevent these kind financial crimes. We will see a much more of a social agenda around holding people accountable, as well as a political environment that is more willing to regulate that.

You also have to recognise the different mindsets around the concept of data and who owns it. In Europe, the paradigm is very much that data is the property of the data subject—an individual has an inherent right to know what data you have, to have a strong voice about how that data is going to be used, and a say in whether you can continue to store it.

In the US, it has always been very different. It is generally thought that data is the property of the entities that hold the data, not the subject. It will be interesting to see how and if that changes in the wake of recent breaches, and the focus on data security rather than data privacy. We expect to look at Europe as having more requirments around data controls than the US, and the General Data Protection Regulation is a great example of that.

> Kelvin Dickenson Head of compliance and data solutions Opus



Onwards and upwards

The deluge of regulatory challenges is showing little sign of slowing, but firms are starting to come to terms with it, and managing it more efficiently, says SmartStream's Peter Moss

The financial industry faces a regulatory landscape that is more complex than ever.

Organisations must navigate a growing body of legislation, part of which is global in character, but much of which is purely regional, due to inconsistencies in the way regulators have acted. The regulatory environment is also more extensive than ever before, as previously exempt lines of business and operations are brought under the oversight of financial authorities.

The scale and complexity of regulation is having a deep impact on companies' operations, from the way they manage data across their businesses, through to how they engage with their customers. For firms that operate in multiple jurisdictions, this can be a nightmare, and a range of suppliers are lining up to help take some of the pain and complexity away. A 'regtech' sector has been born.

Politicians and regulators have also recognised the challenge. The Financial Stability Board, for example, is now driving more regulatory consistency across markets and encouraging standards like the Unique Product Identifier to be adopted. Clearly, achieving standardised global regulation would, in the long term, be a lasting and beneficial outcome for capital markets. In the short term, however, the financial industry would profit from a break in the constant chase towards the next tranche of regulation. Relentless rule-making and limited implementation times have forced organisations to carry out a plethora of tactical fixes, rather than taking a strategic approach.

A breathing space would allow financial institutions to step back, review the efforts of the last few years, and put in place a more robust architecture and a data management strategy capable of underpinning all of their regulatory reporting activities. There may even be regtech solutions available that can dramatically simplify aspects of their regulatory activities. At the top of financial industry's current agenda is undoubtedly the second Markets in Financial Instruments Directive (MiFID II), plus the accompanying regulation, MiFIR. This ambitious regulatory programme aims to make European markets safer, more transparent and more efficient. Extremely farreaching, MiFID II/MiFIR affects participants throughout the financial services sector. It dominated the industry's activities in 2017 and continues to do so in 2018, as firms continue to work hard to ensure they are fully compliant. Of course, MiFID II/MiFIR is not the only piece of regulation financial services organisations are grappling with. Other deadlines are on the horizon, including those for the General Data Protection Regulation (25 May 2018) and the Securities Financing Transaction Regulation (1 January 2019), but MiFID II/MiFIR is a great illustration of where the industry is going.

The MiFID II/MiFIR regulation has been highly challenging for financial services firms. The heavy dependence on reference data for all instruments traded in Europe, combined with the later-than-expected availability of data from the European Securities and Markets Authority (ESMA), has delayed many firms' implementations. There have also been gaps in the regulatory mechanisms that the industry has needed to plug. For example, it has had to come up with a means through which systematic internalisers can publish the financial instruments for which they will offer systematic internaliser services.

But, overall, the introduction of MiFiD II/MiFIR has highlighted the growing importance of accurate reference data as the foundation for reliable regulatory reporting. Access to data is now business critical, leading people to conclude that they need a secondary source for business continuity. Not only is accurate data essential, but the way in which such information is processed is also of vital importance, leading many to put in place control frameworks with independent data sources, to ensure that they catch any collection or processing issues.

Timeliness is also a priority, particularly given the nature of the trading processes involved and the strict timing requirements imposed by the regulation.

The SmartStream Reference Data Utility (RDU) assists financial institutions in meeting these challenges, through the provision of accurate, complete and timely datasets for regulatory reporting. Specifically, in relation to MiFID II/ MiFIR, the SmartStream RDU offers a fully-integrated reference data set to support pre-trade price transparency, post-trade reporting and transaction reporting. It sources data from ESMA, the Association of National Numbering Agencies, the Global Legal Entity Identifier Foundation, the National Competent

Authorities and trading authorities, as well as from enrichment feeds. A financial utility solely dedicated to processing reference data, it can help organisations reduce complexity within their businesses, cut the costs of regulatory compliance, and help provide the rock-solid data foundation that regulatory reporting needs.

Looking ahead, there are good indications that the regulatory implementations of the last few years are starting to slow down, that financial authorities are starting to focus more on global consistency, and that an ecosystem of regtech infrastructure companies is riding to the rescue.

Now is the time for financial institutions to start looking at whether all of the tactical fixes they have been forced to implement over the last few years continue to make sense. The regulation is here to stay, but perhaps there are more cost-effective, more strategic and more robust approaches that can be put in place ones that will also bring the risk of substantial fines down considerably.



GDPR

Becky Butcher reports

After two years of discussions and negotiations, the General Data Protection Regulation (GDPR) will be fully implemented on 25 May 2018, following a two-year transition period. The GDPR is set to replace the Data Protection Directive 95/46/EC, as implemented into UK law by the Data Protection Act 1998.

The regulation has been designed to harmonise data privacy laws across Europe, to protect EU citizen's data privacy and to reshape the way organisations across the region approach data privacy. In a 'GDPR Checklist' report, Marcus Evans, partner at Norton Rose Fulbright, said the regulation presents the most "ambitious and comprehensive changes to data protection rules around the world in the last 20 years".

The new regulations apply to almost all private sectors, and to any organisations processing data in the EU or organisations outside of the EU that target EU residents.

As part of the regulation, companies must actively demonstrate that they have analysed the new requirements in relation to their processing of personal data and that they have implemented a system or programme that

GDPR Update

Companies must actively demonstrate that they have analysed the new requirements in relation to their processing of personal data, and that they have implemented a programme to achieve compliance

allows them to achieve compliance. And, if firms are not compliant at implementation, they will be liable to receive heavy fines.

For breaches regarding general obligations—such as record keeping, data processor relationships, data protection impact assessments, or installing data protection officers—the relevant data protection authorities may impose fines of up to €10 million or 2 percent of the total worldwide annual turnover of the preceding financial year.

For breaches regarding the fundamental data protection principles (including conditions for consent)—such as data subjects' rights and international data transfers—authorities may impose fines of up to 20 million or 4 percent of the total worldwide annual turnover of the preceding financial year, whichever is greater.

Financial services firms will not only have to implement the new requirements into the design of their systems, they will also have to balance them with other requirements, only collecting the minimum amount of data possible.

Equally, in cases where a vendor is employed to process data on behalf of an asset manager, service agreements will have to be considered and potentially amended. When the stakes are so high, firms will have to take this responsibility seriously.

l screen you screen



Government-mandated sanctions can cause a headache for financial institutions. Accuity's Sophie Lagouanelle explains

Stephanie Palmer-Derrien reports

What big challenges is Accuity addressing?

In a nutshell, Accuity offers a suite of innovative solutions for payments and compliance professionals. One of the biggest challenges we are addressing is the sanctions lists filtering, by using specialist technology to help banks to manage sanctions watch lists efficiently. The solution is designed to be reliable and adaptable to a bank's geography. It takes into account the bank's organisational structure and risk appetite and allows compliance officers to adjust the tightness of the net, to ensure alignment with their global and local obligations, while also adjusting to their own risk policy.

Sanctions programmes are tools of foreign policy used by governments and international organisations to designate individuals and entities with whom financial institutions must refrain from processing transactions. Sanctions can be taken regarding known affiliation with a terrorist organisation, for example. Financial institutions are bound to take all necessary steps to prevent the processing of financial flows through to sanctioned entities.

Failure to comply with sanctions regimes can result in significant penalties, reputational damages or criminal prosecutions for financial institutions.

The growing sophistication of sanctions programmes increaes the challenges faced by financial institutions. Regulators maintain a high degree of pressure for the implementation of sanctions regimes, which are increasingly sophisticated. Take sanctions on Russian entities for example: if a Russian citizen is on the sanctions list, all entities in which that person owns more than 50 percent are also placed under a sanction as well.

Previously, banks only had to screen crossborder payments, but the scope has increased a lot, and so more false-positive alerts are being generated.

The trick is to remain compliant while maintaining a low rate of false positives.

Sanctions Screening

If a bank processes 10,000 transfers, the filtering system could raise an alert on, say, 300 of them. Analysis of these alerts might allow you to discard 297 alerts for which it is obvious that they are not going to the sanctioned entity. The three remaining transfers could be actual payments from, or towards, a sanctioned entity that need to be stopped. These would be escalated to a bank's high-level compliance team, which would handle the mandatory regulatory reporting of such cases. Many alerts are searched through, but only a few potentially true ones are found.

The pressure comes from the regulation itself, and from the sheer numbers of alerts to process, which is mechanically increasing, without budgets necessarily increasing in proportion.

On top of this, banks face more detailed requests from regulators and internal auditors. They now seek detailed information and evidence on the filtering process implemented, making sure the risks are being adequately managed. The expectations are not limited to the results of the filtering, but also cover the alerts investigated and the implementation of reporting obligations, as well as requiring all upstream processes to have an extensive and finely-tuned filtering tool.

An auditor could ask to review any wire transfer's audit trail: Where did it go through the system? What was the configuration of the system that day? Which sanctions lists was it screened against? Was there a match? What type of automation was used? What was recorded? There are a lot of details required to reconstruct that story, and that's a real burden. That's where we believe we can help, by providing our clients with functionalities and elements of proof that encompass the full sanction filtering process.

How often are regulators realistically checking up on this?

We worked with a focus group of clients on that question, and it turns out it's regular. However, the concern is not so much about the frequency of regulators' enquiries, but rather how detailed their investigations are. Banks may not all face the same levels of scrutiny—the regulators

Sanctions Screening

themselves have a risk-based approach. The biggest institutions with exposures in areas deemed to be risky, such as trade finance or correspondent banking, will be more closely monitored by regulators and will likely be questioned more frequently.

The challenge for the banks comes from two sides. On the one hand, there is the scope that needs to be covered by the filtering processes: the sheer volume of transactions, their potentially diverse nature (different types of flows for each activity) and format (SWIFT, Fedwire, and so on) and mechanisms that have to be in place. Statistically, the greater the volume, the greater the chance for a sanctioned entity not to be detected. On the other hand, there are the internal resources mobilised by the bank to implement the filtering processes.

Typically, these resources would include organisational, internal policies and procedures, detailed roles and escalation mechanisms, training, making sure teams understand the processes and can make the most of the tools they use (functionalities, possible settings, and so on), information system, maintenance of software and monitoring of system performance.

Having the Accuity Fircosoft filter in place used to be enough, but now banks also need to prove that they know the system and that they understand what they're doing as an institution in this area.

Auditors and regulators will seek to assess how this tool is being actively managed within the organisation.

Expectations also lie in the ability of financial institutions to demonstrate the adequacy of their filtering framework: An institution could have the best systems in place, all the right processes, automation and controls for managing non-compliance risk and operational risk, but this would be all for nothing if controls

and proof cannot be produced out of the system. That's a new dimension, and as a solution provider, we must consider these when designing our solutions.

We are committed to enabling our clients to show evidence in a user-friendly way, and to make that evidence fast to retrieve to help banks show demonstrable control.

There are three main aspects our clients have to prove. First is the model validation: do their teams understand how the system works, the algorithms that drive the screening and how they can be configured? The second is the real-time aspect. The regulations and lists are constantly evolving, and banks need to manage those updates. For that, they need to show proof of control. Finally, downstream, there's the forensic investigation. Compliance officers should be able to look at a transaction and tell the regulators about its full history (the date and persons that have handled potential matches, the analysis performed and decisions taken).

What are the major implications of noncompliance here?

Ultimately, financial institutions face potentially very large fines, (recent non-compliance cases amounted up to fines of billions of US dollars), or even criminal prosecutions. However, in large organisations, it can be difficult to implement central monitoring of all local entities. The fact that regulations differ throughout the world can make it quite difficult to make sure all branches operate under the same procedures. This is just another complexity factor that, without a system, can be difficult to manage and result in significant risks being created.

There is also personal liability for compliance teams. For example, if policies set in their books don't match the configuration and settings in the computer systems, then compliance is not effective. Compliance processes need to show

Sanctions Screening

that there's a clear line of sight between what they define as the risk policy in their procedures and how the system is configured—these need to be aligned and work in sync.

How do banks stay up to date with changing sanctions lists?

The lists change often, and it's the banks' responsibility to keep up. We can provide data, but the liability is with the institutions to ensure our data matches the text from the regulator. Now, flexibility and agility are crucial to keeping up with the regulation.

Organisations need to validate each step before the changes are implemented in the filtering system, and this is where our solution can help, by creating a trade validation mechanism that can allow for easy auditing.

Actualising the sanctions list is a sensitive process. If an institution fails to set up adequate controls over that process, there are operational risks that could potentially occur. For example, if a single person oversees updating the list, they could just remove a name and stop any alerts for payments going to that person. Also, there's a chance of the 'fat-finger' error for any manual process.

If the weak spot of any system lies in people, permanent controls should be implemented and automation favored to ensure the mitigation of the potentially critical impacts of a shortcoming in the filtering process. Getting data from a vendor reduces that risk, allowing the bank to simply verify the list they get. The best quality will come from a combination of a data vendor and in-house control processes.

Could a distributed ledger technology be used to update lists in real time?

I think it would be possible, but not until both the technology and the banks become mature

for this. That said, when it is possible, I expect it will be a must-have by the regulators.

One of the major challenges here is the capacity of banks to open up their systems. The firewalls and data protection processes in banks are very rigid, and a lot of institutions are not even ready to have automated updates. From a trust perspective, blockchain could change that paradigm, but there are still concerns about data privacy.

We were considering launching automated list distribution of our own data within banks' software, and we found they're not even ready for this. They prefer to receive data and upload it themselves, as they are still liable and want to maintain that control.

On the side of the regulator, there needs to be a will to standardise. Each regulator's list is formatted differently today, so a lot of what data vendors do is simply bringing data in line.

So, while blockchain could help with speed and efficiency in updating sanctions lists, there are still obstacles to overcome.

When data can be both certified as coming from the regulator and offered up in an easilydigestible format, then yes, distributed ledger technology could work. But first, these two issues need to be resolved.

> Sophie Lagouanelle Head of risk and compliance solutions Accuity



Dodd-Frank and the Financial CHOICE Act

Jenna Lomax reports

In 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (more commonly known as the Dodd-Frank Act) was signed into federal law by the Obama administration.

Before the reform, federal laws to handle the liquidation of federally-regulated banks only existed for supervised banks. Dodd-Frank expanded these types of laws to potentially handle insurance companies and non-bank financial companies.

However, skip forward 10 years to 2017, and President Trump is in the White House.

In his first 10 months in office, Trump signed over 50 executive orders, several of which focused on dramatically changing the rules surrounding financial regulation. The changes seen in 2017 alone could affect asset servicing, not just in the US, but on an international scale. On 24 February, Trump signed 'Enforcing the Regulatory Reform Agenda'.

This executive order, considered one of Trump's more revolutionary, so far, introduced agency officers that will identify regulations for 'repeal, replacement or modification', especially those that Trump claims are "outdated, unnecessary or impose costs that exceed benefits".

Fast forward five months to June 2017, and the Republicans initiated the Financial CHOICE Act.

The act, which passed in US Congress (233 votes to 186), was created by House financial services chairman Jeb Hensarling.

It virtually desecrates everything the Dodd-Frank built, dramatically scaling back the authority of the reform to regulate large banks and payday lenders.

It also repeals the so-called Volcker Rule (created by former United States Federal

The act virtually desecrates everything Dodd-Frank built, dramatically scaling back the authority of the reform to regulate large banks and payday lenders

Reserve chairman Paul Volcker), which prevents government-insured banks from making risky bets with investments, essentially in a bid to protect the financial welfare of customers.

While the Obama administration brought in the Dodd-Frank Act as damage control in the wake of the financial crisis; the Financial CHOICE Act has moved the financial industry towards a culture of self-regulation—one that looks to be centrally regulated through investor guidelines.

On 16 November, Senate Banking Committee (SBC) chairman Mike Crapo introduced the Economic Growth, Regulatory Relief and Consumer Protection Act, which, at time of printing, was due for consideration by the US Senate.

This act is designed to boost economic growth and decrease regulatory burdens for smaller financial institutions.

The SBC states: "Importantly, it will improve our nation's financial regulatory framework for Main

Street banks, encouraging economic growth in local communities."

The SBC also began holding hearings on the Financial CHOICE Act in November. Representatives from Bryan Cave LLP, a global legal firm, have attempted to look ahead to 2018 and beyond.

In a Lexology article, William Cole, Caitlin Reardon-Ashley and Laura Venn said: "Although 60 votes for passage of the full bill may not be possible, Senate Republicans may still pass portions of the act through budget reconciliation. However, such changes are unlikely to occur before the start of 2018's proxy season."

President Trump's executive orders, as well as his backing of the Financial CHOICE Act, attempts to turn Obama's legislation on its head. But, only time will tell how future US government legislation will change the rules for asset servicing market participants.

What is SFTR?

Pirum's Duncan Carpenter outlines the scope of the incoming SFTR and its potential impact on the securities lending industry both within, and external to, the European Union

As part of the policies identified by the Financial Stability Board (FSB) to increase transparency across securities financing transactions (SFTs), the EU introduced the Securities Financing Transaction Regulation (SFTR), containing three major components:

Conditions imposed on the 'reuse' of financial instruments provided as collateral with prior consent received to allow rehypothecation (this requirement went live in July 2016).

A requirement for managers of UCITS and alternative investment funds (AIFs) to make detailed disclosures to the investors of their SFTs and total return swaps, which need to be published in their periodical and annual prospectuses (this requirement went live in January 2017).

Finally, the regulation introduces a requirement to report all SFTs conducted to an approved trade repository (TR), which poses a significant challenge for all participants, and is the area of the regulation this article will focus on.

What are the main reporting requirements?

 SFTR has a two-sided reporting requirement, with both collateral provider (borrower) and collateral taker (lender) required to report their side of the SFT to an approved TR on a trade date +1 (T+1) basis.

- All new SFTs and any modifications and terminations of existing SFTs must be reported daily.
- As part of the two-sided reporting obligation, a unique transaction identifier (UTI) must be included by participants in their reports to the TRs. This identifier will be used by the TRs to match separately received reports from each counterpart to an SFT.
- Participants must also use legal entity identifiers (LEIs) to identify their counterparts along with many other parties involved in the SFT, such as agent lenders, central securities depository (CSD) participants or central counterparties (CCPs).
- For agency loans with multiple underlying principals, both borrower and lender will need to submit each allocation to a principal as an individually reportable transaction.
- SFTR reporting must also include any collateral linked to the SFTs, including the LEI of the counterparty with whom the collateral was exchanged, and the master agreement under which the transaction was agreed.
- Collateral is reported on T+1 or value date +1 (S+1), dependent on the method of collateralisation used.

Counterparties can choose to delegate the reporting exercise to other parties, but the associated liabilities remain with the in-scope counterparty

- Collateral re-use must be reported daily at S+1 by the reporting entity and not the counterpart.
- Participants also need to keep records of any SFT for a minimum of five years following its termination.

Who will be required to report?

EU-based entities, including their non-EU based branches, conducting SFTs; and EU-based branches of non-EU entities. Financial and nonfinancial companies including all branches are also covered.

Examples of companies that need to report include:

- Investment firms and credit institutions
- CCPs and CSDs
- UCITS, AIFMs, insurance companies and pension funds
- Corporates (NFCs)

There are a few key things to note. UCITS management companies and AIFMs must report on behalf of their funds.

Similarly, if an SFT takes place between a financial counterparty and a non-financial counterparty, then the financial counterparty is potentially

obligated to perform delegated reporting on behalf of the non-financial counterparty if the non-financial counterparty meets certain criteria relating to their balance sheet.

Counterparties can also optionally choose to delegate the reporting exercise to other parties, but the associated liabilities remain with the inscope counterparty.

Are any participants exempt?

Exemptions exist for members of the European System of Central Banks (ESCB), EU bodies that manage public debt and the Bank for International Settlements. An exemption also exists for counterparties that trade with the ESCB under SFTR, but these transactions have to be reported under the second Markets in Financial Instruments Directive (MiFID II).

While captured under MiFID II, the reporting requirement doesn't begin until SFTR goes live.

Which SFTs are in scope?

- Securities loans and borrows
- Repo/reverse repo and buy-sell backs
- Commodities loans and borrows
- Prime brokerage margin-lending transactions

Which transaction details need to be reported?

Although full details have yet to be endorsed by the EU commission, the final regualtory technical standards were published in March 2017 and contained, among a substantial field list, the following key points:

- Principal amount (quantity) and currency
- Lending fee
- Repo rate
- Margin
- Value date
- Maturity date
- Collateral type, quality and value
- Method used to provide collateral

The details above have to be reported across four broad templates: 'counterparty data', 'loan and collateral data', 'margin data pertaining to CCP transactions' and 'collateral re-use'. These four sections span a total of 153 data points, of which 96 fields (predominantly from the loan and collateral field set) are reconcilable at the repository after submission. Most of the reconciled fields have minimal or zero tolerance applied when being matched by the TRs.

When will the reporting obligation start?

Reporting obligations are currently estimated to start in Q2 2019, and will be phased in, based on the type of firm as follows:

- Q2 2019: Investment firms and credit institutions
- Q3 2019: CCPs and CSDs

- Q4 2019: UCITS, AIFs, insurance firms and pension funds
- Q1 2020: Corporates (non-financial counterparties NFCs)

Will reporting only apply to new trades?

No, the requirements will also apply retrospectively to existing transactions under certain conditions:

- SFTs that were concluded before the reporting start date and on the go live date have a remaining maturity of 180 days or greater.
- SFTs with an open maturity that remain outstanding 180 days after the go-live date must be reported within 190 days of the reporting start date.

What are the main reporting challenges?

The main challenges to overcome can largely be grouped into the following four separate sections: data exchange and connectivity, standardisations, reconciliation (including UTI generation) and reporting.

Data exchange and connectivity

Counterparties will need to source disparate and unstructured data both internally and from industry utilities such as triparty agents. Securities loan and repo systems tend to be fragmented with no one system having a complete view of the data, and amalgamating the data workflow will involve numerous third parties for some larger participants.

Post-trade connectivity and lifecycle monitoring play a key role in helping flag up events such as recalls, reallocations, collateral substitutions and trade terminations.

Market price and loan value information are both part of the required dataset, but will change

daily for the vast majority of transactions, so it's reasonable to assume that almost every transaction will need to be modified daily, following the initial report

Standardisation

The data that is gathered needs to adhere to a common standard to meet the high levels of matching requirements and minimal tolerances dictated by the European Securities and Markets Authority.

These standards, which cover such issues as naming conventions and decimal rounding, may seem trivial at first, but stitching together trading activity without them becomes progressively more complex.

Reconciliation

UTI generation and pre-matching before reporting is the backbone to the whole process. Once generated, UTIs also must be persisted to both trading counterparties to satisfy the dual reporting requirement.

Doing this as part of a reconciliation helps ensure that both counterparties will have the same UTI for the same transaction, preventing unnecessary breaks at the TRs post reporting.

Reporting

Although SFTR is primarily a two-sided reporting requirement in nature, there is likely to be a significant amount of one-sided reporting. For example, when an EU-based borrower finds themselves facing a non-EU beneficial owner in an agency lending trade, the borrower must still report the transaction including the LEI of the out of scope beneficial owner.

This creates a dependency on the lender providing information on each allocation, regardless of whether the beneficial owner for each allocation is in scope. This will necessitate the industry

How is the industry tackling SFTR?

There's already been a lot of ground work put in across the industry to prepare for the regulation. Vendors are collaborating, joining forces and having open discussions with each other about how to best serve their clients.

Many vendors continue to publish informative content and run educational sessions to increase awareness and understanding of the regulation. Similarly, industry associations such as the International Securities Lending Association, the European Repo and Collateral Council and the Alternative Investment Management Association are working with their members to tackle issues the regulation poses and have set up a number of working groups to facilitate this.

Lastly, market participants themselves are assigning a considerable resource to internal projects to ensure they meet their requirements.

All of this has been happening despite the resource constraints firms face when already tackling a rewrite of the European Market Infrastructure Regulation, which went live in November, and the go-live of MiFID II in January 2018.

Pirum would advise firms to consider the regulation in depth, specifically the reporting requirements, and begin preparing for the implementation date.

The Pirum/IHS Markit SFTR Solution offers the securities finance industry the expertise and flexibility needed to meet the challenge set by SFTR reporting regulation, providing a modular, fully-hosted SFTR reporting solution that will combine IHS Markit's pedigree in regulatory reporting and data management with Pirum's more than 17 years of expertise in securities finance post trade reconciliation.



Theo Andrew reports

The European Commission's Capital Markets Union (CMU), one of the first policies laid out by president Jean-Claude Junker, aims to create a "true single market for capital" for all 28 member states of the European Union.

In September 2015, with this grand vision in mind, the commission set up the European Post-Trade Forum (EPTF), intended to dismantle the barriers and to develop a future strategy in a post-trade landscape, ultimately, to stimulate jobs and economic growth. More than two years down the road, the commission is still identifying fresh issues and bottlenecks that could hamper the development of a true CMU.

Although it is still very much in the early stages, the effects of the CMU will be felt strongly

across the regulatory landscape, affecting regulations such as the European Market Infrastructure Regulation, the Central Securities Depositories Regulation, Target2-Securities and the settlement finality directive.

New barriers that have emerged include the lack of harmonisation and standardisation of the exchange-traded fund processes, inconsistent application of asset segregation rules for securities accounts complexity in the post-trade reporting structure—all marked as a high priority on the road to the CMU.

In August 2017, the commission opened up a consultation paper on how to better integrate post-trade activities across the EU. Closing in November, the consultation's aim was to highlight any new barriers, as part of its CMU Action Plan, and shaping the regulatory strategy for post-market activities for the next five to 10 years.



Responding to the consultation, the Association of Financial Markets in Europe urged for the "swift dismantling EPTF barriers", as well as the "implementation of a longer-term strategy".

In the European Association of CCP Clearing Houses's (EACH) response to the commission, the association highlighted the role distributed ledger technology could play in reducing the risk and cost of the post-trade process and called for a "minimum industry standard", independent of technology, to ensure "technology-neutral post-trade legislation".

As for the barriers that remain, the European Commission will be working hard to develop resolutions and to create a single integrated post-trading system.

As these bumps in the road are ironed out, there are some emerging trends in the market that the EPTF will have to consider, including the continuous and ever-changing landscape of regulation, the implementation of new technology and the G20 mandate on over-thecounter derivatives.

On top of this, fears surrounding the political uncertainty in Europe seem to have alleviated, although the inability of Angela Merkel to strike a coalition deal, as the European Union's flag bearer, shows just how fragile the grand European project can be.

Overall, it appears as though the industry is ripe and ready to take on the next steps in the application of post-trading in a CMU.

The calls for harmonisation are growing ever louder, and as, especially as the UK's Brexit process trundles on, many are willing the process to accelerate.

Perfect pairing

Ireland's QIAIF fund vehicle combines the country's AIFMD marketing passport with its transparent loan fund rules. Donnacha O'Connor of Dillon Eustace explains more

In Europe, alternative investment funds (AIFs) are the only type of investment fund that can originate loans, given that the UCITS V Directive prohibits UCITS from doing so. Loan origination is possible in the context of the EU's existing European Venture Capital Fund regulation, European Social Entrepreneurship Funds regulation and European long-term investment funds regulations, however, these are very restrictive. While there may be some harmonisation of loan fund rules across Europe in the future, there are currently no other common EU frameworks for loan origination by European AIFs.

Ireland was one of the first EU member states to introduce a specific domestic regulatory framework for Ioan originating investment funds. The Irish Qualifying Investor Alternative Investment Fund (QIAIF) is allowed to originate Ioans, subject to the requirements summarised here. The Central Bank of Ireland devised these rules in 2014 and most recently updated them in December 2016. Key features of QIAIFs are:

- A QIAIF is categorised under the Alternative Investment Fund Managers Directive (AIFMD) as an EU AIF. As such, if it appoints an EUauthorised AIFM, it can be freely marketed, subject only to a simple notification procedure, to professional investors across all of the European Economic Area member states under AIFMD.
- QIAIFs must impose a minimum initial subscription requirement on investors of €100,000, and may be marketed only to qualifying investors.
- QIAIFs generally have no investment or leverage restrictions. The loan origination QIAIF is an exception to that general rule investment restrictions are set out below.
- A QIAIF can be established as an Irish Collective Asset Management Vehicle, a public limited company, a unit trust, a

Irish Funds

QIAIFs are subject to authorisation by the Central Bank of Ireland on a self-certified basis and, provided all of the central bank's requirements are adhered to, authorisation occurs within 24 hours

common contractual fund or an investment limited partnership.

 QIAIFs are subject to authorisation by the Central Bank of Ireland on a self-certified basis and, provided all of the central bank's requirements are adhered to, authorisation occurs within 24 hours.

Tax features

QIAIFs are tax-resident in Ireland, but no Irish taxes on their income or gains apply to them. There are generally no Irish withholding taxes on distributions to or redemptions by non-Irish investors and certain categories of Irish investors provided that a relevant investor tax declaration has been obtained. There are no Irish transfer taxes on the issue, redemption or transfer of QIAIF shares.

There are exemptions from value added tax for many services required by QIAIFs, as provided for under EU law. QIAIFs are treated as residents for the purposes of the Ireland-US double tax treaty and can establish one or more wholly-owned acquisition vehicles to facilitate access to treaties where the QIAIF itself cannot get direct access.

Key features of Irish loan origination QIAIFs

Obviously, not all forms of financing will constitute loan origination for regulatory purposes. So, for example, gaining exposure to loans through secondary market participations, financing involving the acquisition by the fund of an instrument issuer by the debtor such as a bond, a note, Greek bond loans (which are treated as securities as a matter of Greek law), preferred stock or similar instruments would not be treated as loan origination. In the case of some instruments, care needs to be taken to establish first that the particular instruments and how they are used constitute the acquisition of loans or securities and not loan origination under domestic law (such as German Schuldschien).

However, once a fund engages in one origination, then the loan origination rules are triggered in their entirety. A loan origination QIAIF's ability to hold non-loan assets is restricted. It cannot hold non-loan assets if they are unconnected with its loan portfolio, or are not realised collateral or used for treasury management or hedging purposes. As such, hybrid loan or credit funds will generally not be permitted.

The regulatory requirements

The QIAIF fund must be closed-ended. The Central Bank of Ireland has explained that this was a measure intended to avoid the situation that may arise in an open-ended fund where sudden losses of investor confidence lead to investor runs, which in turn lead to loans having to be recalled or sold on. There is no minimum or maximum term, but the term must be stated in the fund's prospectus.

The fund must appoint an EU-authorised AIFM. The actual investment management of the fund may be carried out by an EU or non-EU non-AIFM by way of delegation from the EU AIFM, as long as the entity is registered in its home jurisdiction for asset management. So, for example, an investment adviser registered by the US Securities and Exchange Commission will be eligible to act as investment manager to a QIAIF.

A loan origination fund may be established as a sub-fund of an umbrella QIAIF, the other sub-funds of which may pursue the same or different strategies.

The fund must limit its operations to the business of issuing loans; participating in loans; and participations in lending and to operations relating thereto, including investing in debt and equity securities of entities or groups to which the loan originating QIAIF lends, or which are held for treasury, cash management or hedging purposes. What this means is that the assets of the fund must be restricted to loans (loans originated by the fund, loans acquired in the secondary market; loan sub-participations, and so on), debt or equity of the borrowers or their groups acquired as part of a loan package (for example, equity 'kickers' prevalent in the loan middle market are permitted); hedging operations (for example, interest rate and exchange rate derivatives); treasury operations (cash or money-market instruments, and so on); and assets resulting from the enforcement of security.

There is a diversification requirement of 25 percent per borrower group. This only applies after the ramp-up period, which can be of any duration but must be specified in the prospectus of the fund. Also, these limits will not apply to a loan-originating QIAIF that has reached its end-of-life phase and is closing out positions.

Loan origination QIAIFs must establish and implement documented and regularly updated procedures, policies and processes in respect of a number of credit granting, monitoring and management activities. These include: a risk appetite statement; assessment, pricing and granting of credit; credit monitoring; renewal and refinancing; collateral management; concentration risk management; valuation, including collateral valuation and impairment; credit monitoring; identification of problem debt management; and forbearance. These requirements are similar to those imposed on Irish banking institutions' loan origination activities. Loan managers will tend to have similar procedures already in place.

The fund cannot lend to natural persons; the AIFM, management company, general partner, depositary or delegates or group companies of these; other collective investment schemes; or financial institutions or related companies of these, except in the case where there is a bona fide treasury management purpose that is ancillary to the primary objective of the QIAIF. The fund may not have gross assets of more than 200 percent of its own net asset value.

The fund's ability to acquire loans (or exposure to loans) from a credit institution where the loan was not offered to multiple parties on an arm'slength open-market basis is restricted where the credit institution or a member of its group retains an exposure correlated with the performance of the loan, or where the credit institution or a member of its group provides an administration, credit assessment or credit monitoring service in relation to the loan, whether on an individual or portfolio basis. The fund cannot acquire such a loan in such circumstances unless the vendor or an entity within the vendor's group retains a net economic interest of at least 5 percent of the nominal value of the loan (as measured at origination) and the exposure is not subject to any credit risk mitigation techniques. Alternatively, the fund cannot acquire such a loan unless the QIAIF can monitor net economic exposure of the vendor or its group entity, can value the loan, can monitor the performance of the loan, can stress test the loan independently of the vendor, and will have access to all relevant data on the underlying exposures and cash flows and collateral.

There is a monthly portfolio-level stress-testing obligation intended to identify possible events or future changes in economic conditions that could have unfavourable effects on the QIAIF's credit exposure, which must provide for at least monthly exposure stress testing of the principal market risk factors and apply at least quarterly multifactor stress-testing scenarios.

The QIAIF can provide for redemptions and/or distributions during the life of the fund, to the extent that there is unencumbered cash or liquid assets available for distribution or redemption purposes. If the loans are valued other than by reference to prevailing market prices, then a redemption of the fund's shares can only be made with the approval of the investors. If the QIAIF lends to Irish borrowers, Irish lending-related regulations may apply, such as the central bank's code of conduct for business lending to small and medium-sized enterprises, but not otherwise.

Finally, the QIAIF must provide periodic reporting to investors (at least as of each net asset value calculation point) setting out a breakdown of the originated loans between senior secured debt, junior debt and mezzanine: between loans made with an amortising repayment schedule and those made with bullet repayments; and a breakdown of the loan-to-value ratio for each originated loan. Information must also be provided in respect of non-performing exposures and exposures subject to forbearance activities on an aggregated basis. The QIAIF must also provide periodic reporting to the Central Bank of Ireland, including on its undrawn committed credit lines and each exposure of the QIAIF, subject to forbearance activities.

Conclusion

The QIAIF is a simple and quick-to-authorise fund vehicle that, as an EU AIF, can be marketed to professional investors across Europe using the AIFMD marketing passport. The Irish Ioan fund rules are settled and transparent, and an increasing number of managers are establishing Ioan fund QIAIFs each year.

> <mark>Jonnacha O'Connor</mark> ²artner Jillon Eustace





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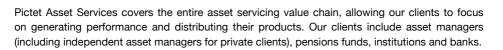
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