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Regulatory Handbook 2017


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Through the looking glass

According to online betting site Ladbrokes, a £1 accumulator bet placed at the beginning of 2016 on Leicester City winning the Premier League, the UK voting to leave the EU and Donald Trump being elected as the 45th president of the US would have paid out just over £4.5 million come November. After bookies, pollsters and almost everyone else failed to see these events coming, it's difficult to look ahead with any certainty—particularly when it comes to regulation of financial markets. Incidentally, this does not make piecing together a regulatory handbook very easy, either.

In June, the British public voted to exit the EU, and while industry voices called for calm, it quickly emerged that the future of the regulatory environment in the country is unclear.

In the same speech in which he hinted at interest rate cuts, Mark Carney, governor of the Bank of England, said the Brexit vote represents a "major regime shift" with an effect on the country's economic prospects that will take more than monetary policy to tackle. He added that "a broad range of regulations might change".

Five months later on the other side of the Atlantic, Trump's shock victory immediately threw global markets into turmoil. The president-elect has repeated threats to repeal the Dodd-Frank Act calling it a "sprawling and complex piece of legislation that has unleashed hundreds of new rules".

He may have a point. But his plans have come under fire, notably from Rick Fleming of the SEC, who praised the effects of Dodd-Frank on the derivatives market, saying: "In place of opacity, we will now have visibility. In place of a tangled skein of blind spots that led to financial panic, we now have an established framework of transparency and regulatory oversight over an $11 trillion market."

S&P Global Ratings was damning, but somewhat more pragmatic, saying in a statement: "Larger deregulation, most notably an overhaul of Dodd-Frank, would be more difficult and require congressional approval."

So who can say what's to come in 2017? Once again, it seems the only certainty is uncertainty, but now there is also a sense that anything is possible.

In this annual regulatory handbook, we take a look at the effects—intended or otherwise—of those regulations that have already come into play, the amendments still required to those in the implementation stages, and the expectations surrounding those yet to come.

In The Debate, experts from all corners of the industry discuss whether harmonising regulations is possible, or advised. And we speak to various financial figures on what's likely to affect the industry in the next 12 months, whether that's PRIIPs, the rise of 'regtech', or the increasing importance of data management.

By this time next year, the world may have been turned on its head all over again. But in the meantime, we hope you enjoy the read, and feel free to get in touch with any comments, questions, or tips as to where I should place my next £1 bet.

Stephanie Palmer
Deputy Editor
Asset Servicing Times

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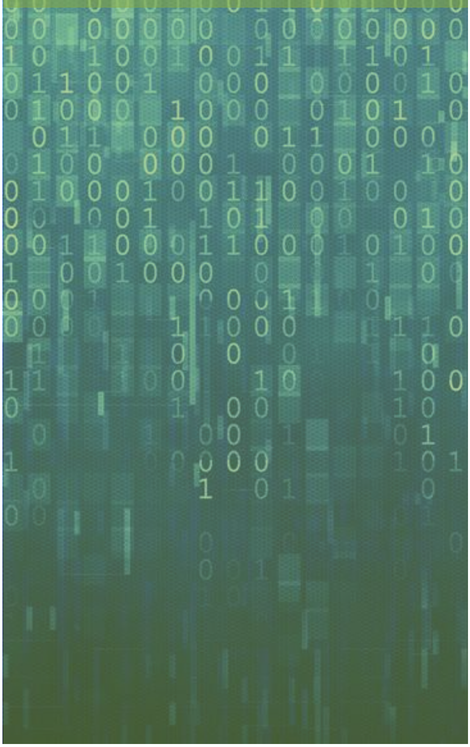

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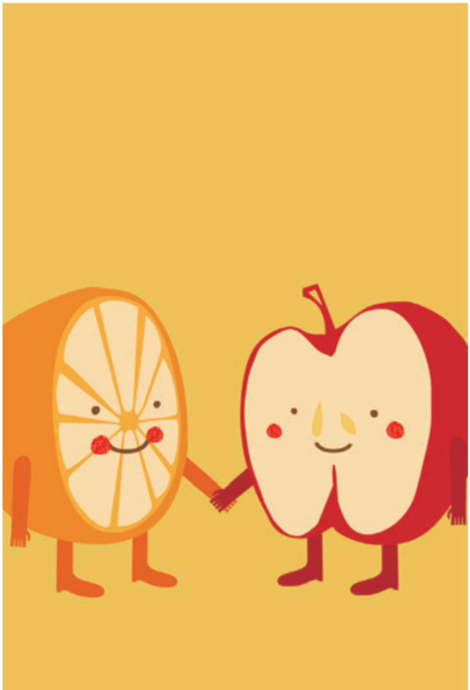

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Imperfect harmony

As the regulatory agenda reaches a crescendo, how important, or practical, is it for regulators to be singing from the same hymn sheet? Experts debate the issues

Can regulations ever be harmonised globally? What could politicians, regulators and market participants do to make this happen, and should they?

Paul North
BNY Mellon

In short, the answer is yes. Looking at the response to the financial crisis there was clear coordination at a global level from groups such as the Financial Stability Board. To some extent we are still working through the proposals that came out from their work. We also see similar coordination on tax issues such as the Common Reporting Standard (CRS), however, it can be argued that this coordination is only effective when the interests of governments and regulators across the globe align.

While all governments are interested in ensuring they collect taxes effectively and in preventing another major financial crisis, it is challenging to align the implementation of global policies when they must be integrated into existing local regulations and market practice. This takes time and can give the impression that global coordination is not effective. However, in hindsight changes have been made even if the outcome is patchy. Until recently it seemed that the march to globalisation was unstoppable and therefore the need for more global coordination and harmonisation was necessary. Maybe this is about to change.

Tim Thornton
MUFG Investor Services

If by 'can' we mean 'is it technically possible' for global regulations to be harmonised, then the answer is yes. Similar principles apply regardless of jurisdiction for primary areas of regulation such as investor protection and systematic risk, and mechanisms can be put in place as demonstrated by recent examples such as the CRS for tax transparency and the concept of 'equivalency' in passporting rules under the Alternative Investment Fund Managers Directive (AIFMD).

To make this happen, the starting point has to be agreeing a common set of principles and standards from which more detailed regulations can be drafted, or existing rules modified to match. Market participants need to buy into this approach and all parties (market participants, regulators and politicians) must not engage in regulatory arbitrage.

Achieving harmonisation is very much in the interests of investors who ultimately bear the costs of compliance with multiple sets of regulation, or inability to access certain products. However, such an approach would create winners and losers at a national level, which brings us full circle.

So if by 'can' we mean 'is it likely' then the answer is more pessimistic. Territory protection, distrust and wider market or political concerns are major barriers. With the rumours recently of pullback by the European Commission of the equivalency rules due to Brexit, and the current political climate unclear of its globalisation goals, it is hard to see a path for further progress on harmonisation in the short or medium term.

Eddie Astanin
National Settlement Depository

Harmonisation of regulation is a strategic way to develop the global post-trade industry and the integration of international markets. Not only regulators, but also central securities depositories (CSDs) play a key role in this process, because their functions as investor CSDs are becoming more important. Equal rules for each player are crucial. A few years ago, when we opened the market for the international CSDs, we created a precedent by transforming the specific local regulation into universal rules using of international practices.

Now, we and our Chinese colleagues are working on opening access to our countries' debt markets, and our previous experience plays a major role in this project's success. Liberalisation of the Russian market brought a real benefit to our country, and we hope that we can use this experience to benefit other markets as well.

Another important factor is the financial technology boom; we can only guess what the impact of that will be. We can say one thing for sure—the emergence of new blockchain technologies could seriously change the financial market's landscape.

Fintech drastically changes business processes. The unified perception of the regulation of new technologies creates a synergy for their controlled evolution and will allow avoidance of a new imbalance in the development of markets.

We take an active part in initiatives aimed at harmonisation at both global and regional levels. Within the framework of the World Forum of CSDs we are working on devising a harmonised disclosure reporting format for CSDs across the world, according to the requirements of the Committee on Payments and Market Infrastructures, the International Organization of Securities Commissions (IOSCO) and the Association of Global Custodians.

At the regional level, among the participants of the Association of Eurasian CSDs (AECSD), we are exchanging information on amended laws of the member countries and elaborate recommendations on changes in regulation. AECSD representatives have also taken part in discussions about the harmonisation of financial market laws in the Eurasian Economic Commission.

Nachi Muthu
Broadridge

Since the 2008 crisis, global regulators have been trying to work together to find answers through organisations like the Financial Stability Board (FSB) and the Bank for International Settlements (BIS).

For example, although the FSB has been instrumental in bringing together G20 countries for derivatives reforms, we have seen differences between the US and EU regulators in terms of specific mandates. Global regulators will agree on higher-level themes, but from an implementation point of view, the reality is that there will be significant variations and, in some cases, completely different mandates.

Paul North
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BNY Mellon

Tim Thornton
Managing director
Fund Services
MUFG Investor Services

Eddie Astanin
Chairman of the executive board
National Settlement Depository

Nachi Muthu
Head of derivatives trading and clearing solutions
Broadridge

Paul Ellis
Head of product solutions for regulatory change
HSBC Securities Services

In addition, implementation timelines between regulators would differ by several years. While recent events such as Brexit and the US elections may pose an immediate risk to globalisation, markets remain global and will continue to put pressure on global regulators to work together.

Paul Ellis
HSBC Securities Services

I don't think full harmonisation of global regulations is possible, but that should not distract regulators and policy makers from being guided by the core principle of achieving globally consistent and effective regulation.

Harmonisation has benefits for market participants and ultimately asset owners, given the potential to lower implementation and business-as-usual compliance costs. The practical experience is somewhat different. Financial regulations vary due to deep-seated and ancient differences in national law. For example, there is commonly divergence in laws of property, collateral, insolvency and tax.

G20 derivatives reforms were designed with harmonisation in mind. However the timing of application has been phased and often delayed in terms of requirements to report, clear or collateralise derivatives. Further, the implementation at country level, particularly in terms of the detailed requirements, has been inconsistent from one country compared to the next.

On the one hand, this reality has given firms time to implement, but on the other, it has required operating model customisation to ensure that local requirements are accommodated.

Some post-financial crisis regulations have had additional territorial implications, which conflict with regulations and market practice in overseas markets. This lack of harmonisation has created practical conflicts for firms to manage on a cross-border basis.

Notwithstanding these challenges, it is important for regulators and market participants to build on the experience of global initiatives such as G20 derivatives, Basel III and the CRS, with the objective of providing asset owners with safe, consistent and cost-effective financial markets.

Eric de Nexon
Societe Generale Securities Services

Over the past few years, the overall trend has led the world towards more globalisation in many, if not all, areas. Financial markets are no exception to this trend, as demonstrated by the 2008 crisis when the main principles for restoring and strengthening financial stability were defined at the highest international level, the G20.

Transnational bodies in turn then refined these principles further at the international level in order to foster their implementation at national and/or regional levels. And although there have been differences in transposition across the globe, this initiative clearly shows that there is a strong conviction for the need to define a harmonised approach for global markets and their interconnected players.

This transformation has come from the general awareness of the trend towards increasing integration and globalisation. It must be pointed out, however, that not all activities, markets segments and regions have reached the same level of integration. For example, one cannot compare the securities markets in Europe, which is still very fragmented, with the over-the-counter derivatives market, which is global by nature.

Regulators and industry representatives must continue to work hand-in-hand to frame a regulatory environment that favours and accompanies the move towards the further integration of fragmented financial markets while preserving those that are already global. With regards to the European securities financial markets, a lot still remains to be done in order to remove the numerous barriers that continue to hamper a single integrated market 16 years after the introduction of the single currency.

Addressing several important aspects could indeed contribute to the effectiveness of this regulatory framework, which is still being developed and implemented.

These include:

- Respecting the role attributed to each level of the legislative process;
- Fostering and assessing the effectiveness and accuracy of the principles and rules introduced, balancing both their objectives and operational realities;
- Ensuring harmonised transposition and interpretation of the texts across member states; and
- Finally, going beyond global regulations, encouraging member states to remove or adapt the multiple local legal peculiarities that continue to impede or slow down the implementation of standardised cross-border processes.

Paul Burleton
GFT

Many people will have been cheered by the words of Commodities Futures Trading Commission (CFTC) chair Tim Massam supporting modern regulation and international cooperation, amid speculation of sweeping financial regulatory reforms in the US proposed by President-Elect Donald Trump.

The CFTC has worked as hard as any regulator over the last few years to drive harmonisation in the swaps market, but given that Trump plans to dismantle the US Dodd-Frank Act, will this have all been a wasted effort?

The UK's vote to leave the EU threw an almighty spanner in the works in June 2016, following which UK banks have been lobbying against much of the European Securities and Markets Authority (ESMA) rulebook, most notably the bonus cap, and calling for a UK regulatory regime that does not harm their competitiveness in global markets.

The debate on 'equivalence' and 'passporting' will go on for months as the UK government finalises its plan to exit the EU, but it is likely there will be some divergence in the coming years. Regulatory harmonisation is a good thing for global financial institutions, with efficiencies created by sharing the cost of

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VP of client solutions for
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The Smart Cube

compliance across multiple regions and entities. In addition, conflicting regulatory standards are a global compliance officer's worst nightmare. We have seen evidence of this where the data privacy laws have prevented full compliance with some regulatory reporting. Unfortunately, when it comes to cooperation between regulators, many have their hands tied by the politicians and bureaucrats who are pulling the strings. While this remains, full regulatory harmonisation remains a distant pipe dream.

Rachel Sexton
EY Fraud Investigation and Dispute Services

Tackling financial crime and fraud is front-of-mind for many executives in the financial services industry and we are increasingly seeing financial institutions and governments working together to fight it on a global scale. In some cases, such as combatting money laundering, a move towards global convergence is already happening.

It is in everybody's interest for local anti-money laundering (AML) regulations in each country to be as equivalent as possible, to prevent money launderers finding and exploiting the weakest link. Often we've seen diverging standards actually create risk as firms try to match a patchwork of local requirements against their global client onboarding processes.

Collaboration on a global level on AML has been spearheaded by the Financial Action Task Force (FATF), which sets the international standards for anti-money laundering measures and combatting the financing of terrorism. FATF monitors countries' progress in implementing the FATF recommendations; reviews money laundering and terrorist financing techniques and counter measures; and promotes the adoption and implementation of the FATF recommendations globally.

However, it is much harder to envision a future with globally consistent sanctions compliance. Sanctions programmes are used as a foreign policy tool by many governments, leading to clear differences in approaches. While these changes are sometimes driven by regional blocs, such as the EU, we expect a trend towards political fragmentation on issues such as Syria and the Ukraine that could drive significant changes in sanctions policy between regions—particularly the EU and US—while Brexit may lead to a change in the UK's regime relative to the EU.

Regulators' continued focus on sanctions enforcement—in the UK, the Treasury has recently set up the Office of Financial Sanctions Implementation—is a clear signal that firms will need to dedicate significant resources to anticipating and implementing regulatory change into 2017 and beyond.

Michael Cooper and Alex Foster
BT Radianz Services

Unifying global regulations has been a central goal of government and financial markets since the financial crisis. However, while harmonising regulations has come a long way, and is theoretically possible, whether it will yet prove practical is another matter.

Take, for example, the derivatives market. Earlier this year, EU and US regulators finally struck an accord on a derivatives regulation deal, after almost three years of impasse, facilitating trade between businesses and clearing houses in both markets. Timothy Massad, chair of the CFTC, called the deal "a significant milestone in harmonising regulation of these markets".

Skip forward less than 12 months and Brexit and an impending Trump presidency have again thrown harmony into doubt, with Trump seeking to repeal some of the Dodd-Frank Act, saying it has "made it impossible for bankers to function".

Notwithstanding the current political climate and emerging trends towards a less globally aligned world with more isolationist policies, several other factors could make the alignment of global regulations more difficult.

One is the way legislature and directives are implemented at a state level versus a country level. Another is that different political entities around the world have different processes and procedures—not to mention uniformity of desire—so that even timetabling coordination of application becomes a challenge.

So, while for the last 10 years the world has been working towards harmony in financial regulation, the new political landscape is going to make harmonising global regulations, at the least, very hard indeed.

Bhawana Khurana
The Smart Cube

Inconsistent regulation across jurisdictions leads to inefficient and ineffective enforcement, and the financial services industry is no exception. While the global financial crisis was caused by numerous issues, inconsistent regulation of this global industry was certainly a key contributor.

Since then, multiple lengthy regulations (including Dodd-Frank, the Volker Rule, EMIR, the Markets in Financial Instruments Directive II, Basel III and IV, and Solvency II) have been drafted and implemented, each working independently toward a common goal—to reduce the possibility of another crisis. The most immediate implication of this process has been a sharp rise in regulatory reporting costs, without any real guarantee that another global crisis won't happen.

But harmonising financial regulations globally is not easy. It would entail setting guidelines for various aspects—including existing regulations' synchronisation (with the objective of retaining their positive aspects while plugging current loopholes); regulatory policy development; effective regulatory implementation; and most importantly, cross-border supervision and enforcement—while trying to optimise the money and effort spent by participants on regulatory reporting and compliance.

Leading investment banks, asset managers, asset servicers and insurers are deploying more reasonable solutions, such as putting a more coordinated effort toward data management and leveraging data commonalities that exist across regulations. With recent macroeconomic events creating roadblocks for (and possibly eliminating) more ground breaking efforts such as the Transatlantic Trade and Investment Partnership, utilising these smaller solutions can go a long way to steering things in the right direction.

Neil DeSena
Managing partner
SenaHill

Henry Balani
Global head of strategic affairs
Accuity

Kelly Hastings
Vice president and chief risk officer
CIBC Mellon

Mahima Gupta
Senior manager
Sapient Global Markets

Robert Angel
Head of product and regulatory solutions
Northern Trust

Neil DeSena
SenaHill

In general, global initiatives are difficult to pull together. Take the UN as an example. At its core are countries, and each individual country has different beliefs, goals, ambitions, governments and more.

The UK's exit from the EU should itself be proof enough that global regulation will not work. General Data Protection Regulation (GDPR) sponsored by the UK (when it was still part of the EU) was created to give consumers back the ownership of their own data. This was approved by the European Commission and affects any banks with clients in the UK, which by default will affect all the large global banks. While this is a regulation, it is geared toward the empowerment of the individual and it is not designed to tighten or loosen the reins around banks.

The use of the shared economy to provide a platform to share data to drive regulation is more realistic than sharing regulation. Look at what is being done in the state of Delaware in the US; they are allowing companies to form and digitally issue and store documents on the blockchain. Our efforts would be better spent getting the data to the blockchain and empowering the regulators to view and analyse the data globally.

Henry Balani
Accuity

The challenge of harmonising global regulations lies primarily in the structure of the sovereign nation state. When passing and enforcing laws for its member citizens, beliefs on various social and economic issues of the day must be reflected. While historically this has proven effective in addressing citizens' concerns, today's challenges are more global in nature, affecting citizens across countries. For example, global trade agreements are negotiated by sovereign nations, representing their own interests at a global level.

The recent Canada-EU trade agreement showcases this, with Belgium delaying EU negotiations due to opposition from regional parliaments. The ability to harmonise global regulations is directly related to the financial implications for individual nation states. AML and terrorist financing regulations are transnational crimes, requiring multiple government jurisdictions to address the criminal elements of illicit funds crossing borders. While AML regulations differ across countries, there have been significant attempts to harmonise them, as governments recognise the damaging impact on their economies.

For market participants, the extent of the financial impact on an individual nation state plays a significant factor while coordinating global regulations. When there is explicit recognition of the risks of money laundering and terrorist financing, attempts to harmonise regulations make good progress. In terms of regulators, the existence of intranational organisations like the FATF also provide incentive to harmonise regulations. However, despite attempts to harmonise, there will always be certain nation states that have a different values related to implementing and enforcing AML regulations.

Kelly Hastings
CIBC Mellon

There is the potential for global regulations to be further harmonised—asset servicing is a global business. There could be many benefits to harmonisation, such as supporting a level playing field for all jurisdictions and fostering a better understanding of the requirements by all market participants. With global regulatory harmonisation, systems can be adapted to meet one set of consistent regulatory requirements, thereby reducing costs.

Harmonisation can help streamline processes and avoid duplicate efforts, allowing market participants to better focus on emerging issues. Industry associations can provide a good forum for market participants to provide transparent and meaningful feedback to regulators.

In Canada, we have seen the Financial Transactions and Reports Analysis Centre of Canada (FINTRAC) and the Office of the Superintendent of Financial Institutions Canada (OSFI) working together on AML and anti-terrorist financing activity efforts. Together, KDPW Group

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KDPW Group, including KDPW as the Polish Central Securities Depository and KDPW_CCP as the EU-authorised central counterparty clearing house, offers a competitive, integrated and complementary package of depository, clearing, settlement and added-value services. Using the synergies between KDPW and KDPW_CCP, the KDPW Group provides its clients with services meeting the highest international standards.

FINTRAC and OSFI are developing a joint approach to supervision and regulation with the aim of maximising each agency's expertise. In Canada there is also a Cooperative Capital Markets Regulatory System in development that proposes a uniform provincial-territorial act to regulate capital markets. The cooperative system aims to achieve greater market efficiency and to strengthen Canada's ability to manage systemic capital market risk.

Looking globally, there has been increased cooperation between global regulators, especially after the 2008 market downturn. The Basel Accords are evidence of greater cooperation across many regulatory bodies working towards strengthening the global financial system.

Mahima Gupta
Sapient Global Markets

Firms are allocating internal resources toward building hundreds of different connections to fit varying regulations, only to do it again when a new regulation goes live or a change is made to an existing requirement. Data translation is messy, inconsistent and is only getting more complicated. The idiosyncrasies attached to each regulation's data requirements necessitate a methodical approach to avoid regulatory scrutiny and minimise compliance costs. This entails building a core competency around data messaging translation and presentation that is flexible enough to meet any format and pivot as necessary when new regulations or standards emerge.

Developing a systematic data translation and exchange solution can help firms to efficiently identify what went wrong or what's missing, and quickly determine how to fill the gaps. It also presents an opportunity to become nimbler and dedicate more time and resources elsewhere, while avoiding regulatory scrutiny. At a regulator level, and particularly in Europe—where regulations are addressing every aspect of the financial markets through AnaCredit, Capital Requirements Regulation and Directive IV, the European Market Infrastructure Regulation, and more—from the European Central Bank's Integrated Reporting Dictionary (BIRD) initiative is a promising step. Working to define a consolidated, granular data description and its transformations needed to derive the reports requested by authorities could boost data quality and consistency, while making it cheaper and more efficient for banks to prepare. If that was replicated at global level, it could have an immense impact on harmonisation efforts.

Robert Angel
Northern Trust

In the post-crisis environment, a number of international fora have focused their efforts on establishing consistent financial standards to implement across the world. The G20 commitment to centrally clear over-the-counter derivatives is an example, soon to be mandated through EMIR in the EU and Dodd-Frank in the US.

Work undertaken by the FSB, IOSCO and the Basel Committee highlights the growing intent to set consistent requirements, increasingly necessary due to the global nature and interdependence of financial markets. But setting global standards is different from harmonisation.

At first glance, the same requirements are implemented throughout the EU, but the discrepancies in the detail and impact of legislation in each member state are innumerable. The European Commission's building of a capital markets union highlighted insolvency law differences as preventing cross-border activity and market integration.

Where there is a loss in financial opportunity resulting from regulatory inconsistency it is clear the aim should be harmony, although the current political environment makes this more difficult.

Harmony also becomes impossible where inconsistencies within legislation are inherent. The obligation to obtain more personal data to comply with AML requirements is entirely contradictory to the rights afforded to individuals through data protection laws. Perhaps it is necessary to accept that although consistent global regulation is desirable, as with institutions and societies, diversity is also beneficial.

The key is understanding what to harmonise and where harmonisation is less critical, and looking to validate where leveraging new technologies can ease the burden of compliance. **AST**

PRIIPS

WHAT YOU NEED TO KNOW

Delay your way: the European Commission has bowed to pressure from the Parliament and Council and agreed to delay the regulation on key information documents (KID) for packaged retail and insurance-based investment products (PRIIPs) by 12 months. The delay gives issuers and distributors of PRIIPs until 1 January 2018 to put the provisions in place.

Must be twins: the delay was a result of EU regulators' desire to offer consumers the benefit of having KIDs that are more easily comparable and standardised.

Make sure the KID is alright: the right KID is important, as manufacturers will be liable for damage caused to the retail investor as a result of reliance on a KID that is misleading, inaccurate, or inconsistent with pre-contractual or contractual documentation.

UCITS up and take notice: the UCITS IV key investor information document (KIID) is deemed to be equivalent to the PRIIPs KID for retail funds until 2020. This transitional period could be extended, the UCITS KIID could be replaced with the PRIIPs KID, or the two documents could be deemed to be equivalent.

PRIIPs and proper: How to make the KID fit the occasion

The scale of the impact on the industry will be huge. Donnelley Financial Solutions reports on the requirements at play

From January 2018, providers of investment products will need to give retail investors a key information document (KID)—a 'standardised and simple document giving key facts on the product'.

The KID will need to explain clearly, in three pages, everything the potential investor needs to know to make a sound investment decision.

The new rules will apply to packaged retail and insurance-based investment products (PRIIPs) under the regulation of the same name.

The regulation not only covers collective investment schemes but also other 'packaged' products offered by banks and insurers, although pensions, non-life insurance products and instruments that are directly purchased by the retail investor, such as corporate shares and sovereign bonds, are out of scope.

Impact on manufacturers and distributors

The new PRIIPs Regulation represents a major challenge for manufacturers and distributors of financial products right across the banking, insurance and asset management industries, not least because of the very tight timelines involved.

The new documents will be costly and time-consuming to create and any inaccurate, out-dated or misleading information could lead to non-compliance.

From a product manufacturer's perspective, the regulation covers a diverse range of products and when considering the constraints of disclosing the product in a standardised format, not to mention the fact that the disclosure is constricted to a three-page document, the difficulties become increasingly clear.

Other areas for product manufacturers and distributors to consider include:

- Inventory of products in scope, format and content;
- Data management, including the capture of data, creation and disclosure of relevant information in the PRIIPs KID in an accurate and timely manner; and
- Which systems they will use to create and publish PRIIPs KID documents.

To make the most of the PRIIPs Regulation, the financial industry will need to continue to work on a number of other important issues, particularly cost and risk disclosure. Creating a single market where retail investment products will be made easily comparable for retail investors across insurance, banking and asset management is the key focus for the European supervisory authorities. The industry will have to deal with these challenges collectively.

There is no doubt that the scale of the impact on the industry is huge. In 2009, the European Commission estimated the PRIIPs market to be almost €9 trillion in value within the EU.

There will be a strain on resources with responsibility for creating and maintaining PRIIPs KIDs while meeting rigorous standards for disclosure and accuracy.

PRIIPs KID requirements

The regulation introduces a new form of standardised product disclosure in the form of a KID. The regulation applies to PRIIPs manufacturers and anyone advising on, or selling, PRIIPs. The document must be given to the retail investor before it is bound by any contract. The KID must be:

- A pre-contractual, plain language document containing specific information in relation to the product being offered;
- A three-page document, A4 size;
- A standalone document, separate from other marketing material (so simply cross-referencing other brochures is not an option); and
- Available in the official languages, or in one of the official languages, used in the part of the EU member state where the PRIIPs are distributed.

The rules also suggest that where complex products are being offered, a comprehension alert should be inserted in the document.

A 'manufacturer' is defined in the regulation as 'any entity that manufacturers PRIIPs' or 'any entity that makes changes to an existing PRIIP, including, but not limited to, altering its risk and reward profile or the costs associated with an investment in a PRIIP'.

A ‘person selling’ a PRIIP is defined as a person offering or concluding a PRIIPs contract with a retail investor.

The PRIIPs Regulation captures a broad range of products. The regulation states that a ‘packaged retail investment product’ is an investment ‘where the amount repayable to the investor is subject to fluctuations because of exposure to reference values or to the performance of one or more assets which are not directly purchased by the investor’.

An ‘insurance-based investment product’ is an ‘insurance product which offers a maturity or surrender value and where that maturity or surrender value is wholly or partially exposed, directly or indirectly, to market fluctuations’.

The European supervisory authorities, represented by the European Insurance and Occupational Pensions Authority, European Banking Authority and European Securities and Markets Authority, finalised their proposals for the regulatory technical standards (RTS) to be applied to the KID for PRIIPs. The RTS and the accompanying impact assessment were published and submitted for endorsement to the European Commission on 7 April 2016.

The European Commission adopted the PRIIPs Delegated Regulation on 30 June 2016. However, the RTS were subsequently rejected by a broad majority of the European Parliament during a voting session held on 14 September 2016.

One of the main reasons put forward for rejecting the RTS was that the proposed methodologies for the calculation of future performance scenarios are flawed and the information provided in the KID does not met the test of being ‘accurate, fair, clear and not misleading’.

The delegated regulation will now need to be revised by the European Commission and it in turn will work with the supervisory authorities to provide an updated set of PRIIPs regulatory technical standards.

Donnelley Financial Solutions is strongly advising those affected by the PRIIPs Regulation to continue to move forward with implementation despite the delay. **AST**

“Donnelley Financial Solutions is strongly advising those affected by the PRIIPs Regulation to continue to move forward with implementation despite the delay”

SFTR

WHAT YOU NEED TO KNOW

T+1 and counting: reporting will be on a T+1 basis and both the collateral giver and taker are required to report their side of the securities finance trade to a registered trade repository.

Don't forget to supply a UTI: a unique transaction identifier must be included by participants in their reports to the trade repositories so they match separately received reports from each counterpart to a trade.

Love the way you LEI: legal entity identifiers have to be employed to identify their counterparts as well as the rest of the value chain, including agent lenders.

On the level: the European Securities Markets Authority's level two consultation appeared to pull back on the requirement to report on collateral used as part of a securities finance transaction on a T+1 basis, as well as admit that there were still some clashes with the European Market Infrastructure Regulation. The feedback from this second stage will be used to finalise the draft technical standards, which will be submitted to the European Commission by the end of Q1 2017. The final version of SFTR will then come into force from 2018.

It takes two to tango

The first year under SFTR has seen a sophisticated dialogue develop between ESMA and the market, which could set the standard for the future

The Securities Financing Transaction Regulation (SFTR), which began its implementation process in January 2016, closed its latest consultation period, at the time of writing on 30 November, and is now gearing up for its third implementation deadline on 13 January 2017. From this point, transparency in periodic reports requirements for UCITS and alternative investment funds begin to apply.

The new framework, aimed at improving market transparency, still has some features under construction as others come into effect, meaning the European Securities and Markets Authority (ESMA) is still receiving a plethora of comment letters from market participants seeking greater clarity on upcoming standards.

The next phase of SFTR will require UCITS and alternative investment funds to report their use of securities financing transactions and total return swaps in the annual report of every UCITS or alternative investment fund under management, and in each six-monthly report for UCITS.

This information must be included in the first annual or six-monthly report published after 13 January, although this may include a reporting period beginning before January 2017.

A review of the first year of business under the SFTR umbrella reveals the emergence of a strong relationship between between ESMA and market representatives. The ongoing negotiations have involved multiple consultations and redrafts as ESMA has involved interested parties at each stage of the process, instead of simply passing down a tablet of new commandments from on high. The collaborative process has allowed for all parties to express their respective aims of market stability and business continuity.

The market speaks

Following the first January 2016 implementation date, the International Capital Market Association (ICMA) published a statement in April calling on the regulator not to overreach in its reporting requirements at the risk of straying into collecting redundant information or overlapping with existing reporting frameworks.

"While we acknowledge and welcome the explicit exemption from Markets in Financial Instruments Regulation (MiFIR) reporting requirements of all transactions that will be reported under SFTR, we also note that this exemption does not extend to SFTs that have been explicitly exempted from SFTR reporting, in particular SFTs with European System of Central Banks counterparties," ICMA explained in its statement.

ICMA added: “We strongly disagree with this approach as we believe that the SFTR provides the only appropriate framework to report SFTs and that the inclusion of the aforementioned transactions in MiFIR transaction reporting goes against the clear political decision to exempt these trades from SFTR reporting obligations.”

The potential for inconsistencies in technical terms and standards across similar reporting regulations also featured prominently in the list of concerns initially raised by industry bodies.

The International Securities Lending Association (ISLA) submitted its own response letter to the Financial Stability Board’s (FSB) proposal for implementing stability measures for the ‘shadow banking’ sector, in which it highlights inconsistencies between ESMA’s and the FSB’s definition of certain aspects of the securities lending market.

And the regulator listens

After receiving a deluge of industry comment, a well-informed ESMA smartly sidestepped one of the industry’s worst fears of creating a ‘major liquidity issue’ by revising its collateral reporting rules in its level two consultation, published in October 2016.

Specifically, the requirement to report on collateral used as part of an SFT on a T+1 basis was amended to make the deadline for reporting the day after value date.

Ben Challice, COO at Pirum Systems, explained: “Clearly you don’t know what you’re going to use as collateral until the value date of the collateral requirement.”

He said: “ESMA seems to have listened to the market and now acknowledges that to lock up collateral before moving it would create major liquidity issues in the market.”

“They have now proposed that it can be reported on value date plus one for non-cash trades (pending further consultation).”

ESMA acknowledged that it had learned much since it first began drafting the reporting standards for the European Market Infrastructure Regulation (EMIR), on which SFTR’s own requirements are largely based, and saw the need for improvements as a result.

“[The authority] understands that with the exception of trades against a collateral basket both counterparties will have agreed the collateral for an SFT at the time the SFT is concluded or at the latest at the end of the day on which the SFT is concluded,” explained ESMA in its latest consultation paper.

“For repo trades against a collateral basket, the counterparties would report the collateral allocation as soon as it is known, but at the latest at the end of the value date plus one.”

ESMA also used the second level consultation to respond to the market’s concerns around consistency and reiterated its aim to “ensure a level playing field” for market participants’ access rules and “align reporting standards to the maximum extent possible” across the various EU reporting regimes.

According to ESMA, this required two amendments to EMIR’s technical standards on reporting, plus detailing the operational standards for data access, comparison and aggregation. Although SFTR and EMIR are primarily EU-focused, the nature of the reporting requirements will affect global entities that interact with the EU market for securities lending activities.

Fran Garritt, director of securities lending and market risk for the Risk Management Association (RMA), said: “The RMA Securities Lending Committee is monitoring SFTR as many US agent lenders and beneficial owners will be impacted by SFTR reporting rules due to the global nature of the business. Most US agent lenders service European clients, and both US agent lenders and beneficial owners lend both to European counterparties and European securities.”

The feedback ESMA received from this consultation will now be used to form the draft technical standards. They will be submitted to the European Commission by the end of Q1 2017. The final version of SFTR will come into force from 2018. **AST**

GDPR

WHAT YOU NEED TO KNOW

Fine until it isn't: fines of up to 4 percent of annual worldwide turnover and €20 million in some cases, up to 2 percent of annual worldwide turnover and €10 million in others.

Reach for the different skies: the GDPR catches data controllers and processors outside of the EU whose processing activities relate to the offering of goods or services to, or monitoring the behaviour (within the EU) of, EU data subjects.

Breaches must be preached: data controllers must notify most breaches, without undue delay and within 72 hours of awareness, unless in special circumstances.

Effective date to hate: the GDPR will apply throughout the EU from 25 May 2018.

EU data protection: Lessons from the US

Requiring data custodians to have a protection regime and report on their progress is just the beginning, says Ray Pompon of Linedata

The European General Data Protection Regulation (GDPR) has been adopted as of April 2016, and despite the UK's decision to leave the EU, it is widely expected that all participating countries will fully comply as of the deadline in May 2018.

While the idea of overarching regulations covering data protection is a novelty in Europe, similar frameworks already exist in the US. The lessons from US adoption of these laws, including their effectiveness and public attitudes towards them, can help guide the European experience. It is likely that the GDPR will increase public knowledge of data breaches, and therefore raise the pressure on companies to demonstrate best practice. Data leaks in the US are routinely publicised via alerts under the current regulatory framework. Once the population understands the regularity of breaches via these alerts, they become annoyed and upset. The European GDPR mandates notifications in the event of a data breach, so this is something we will start to see in Europe, along with the associated awareness and dissatisfaction from customers. This is, in general, a good thing. The most effective determinant of a company's behaviour will be pressure from customers.

This is perhaps the greatest lesson that the EU can take from the US regulatory framework, but there also seem to be a number of ways in which the European GDPR is leading the way.

The most obvious of these is the fact that the GDPR is one unified framework, in contrast to the US system. The US is bound to a number of laws covering data protection, including the Health Insurance Portability and Accountability Act and the Health Information Technology for Economic and Clinical Health Act (HITECH and HIPAA, respectively) for medical data, the Financial Services Modernization Act (more commonly referred to as GLBA) for banking, and the Public Company Accounting Reform and Investor Protection Act (better known as SOX) for financial reporting systems. There have also been several attempts at federal breach notification laws.

This piecemeal approach has been a source of frustration, and there has been a clear long-term desire for a unified regulatory framework.

There is much to recommend the European approach to data protection regulations. The greatest challenge will be to implement the GDPR in an efficient and timely way.

Organisations consistently underestimate the complexity of implementing security programmes.

Upon investigating the vulnerabilities and threats related to an organisation, many businesses are overwhelmed: this will be the experience of many companies currently implementing the European GDPR.

From this point, there is both a right and a wrong way to resolve the issue. The wrong way is to think that by implementing a security programme, publishing a policy and installing a few firewalls, the problem will go away.

One can already see the tension with large US tech companies and the GDPR privacy restrictions

Ray Pompon
Director of security
Linedata

While it can be inaccurate to make cultural generalisations, there is the impression that Europeans are less trusting of corporations than their North American counterparts.

As a result, US laws can be seen to be lagging on privacy protection, given privacy is desired but not required. As a result, one can already see the tension with large US tech companies and the GDPR privacy restrictions.

The application of laws such as the GDPR are therefore likely to be limited in scope or focused solely on unauthorised access to data such as breach. European residents should have greater protection through the regulatory framework than those in the US.

This does not address the ever-evolving threat that requires constant attention. The second approach is to embed a security-first mindset across the business—only then do security measures become easy and effective.

The GDPR is a good start, and guided by the right principles. Data protection is an evolving field, unlike food or transport safety. Criminals will adapt and try to overcome any security measures. Tech is evolving to create new situations where new problems may lie. it is clear that both regulatory approaches and companies' processes must evolve to keep track. Requiring data custodians to have a protection regime and report on their progress is a good start, but it is just the beginning. **AST**

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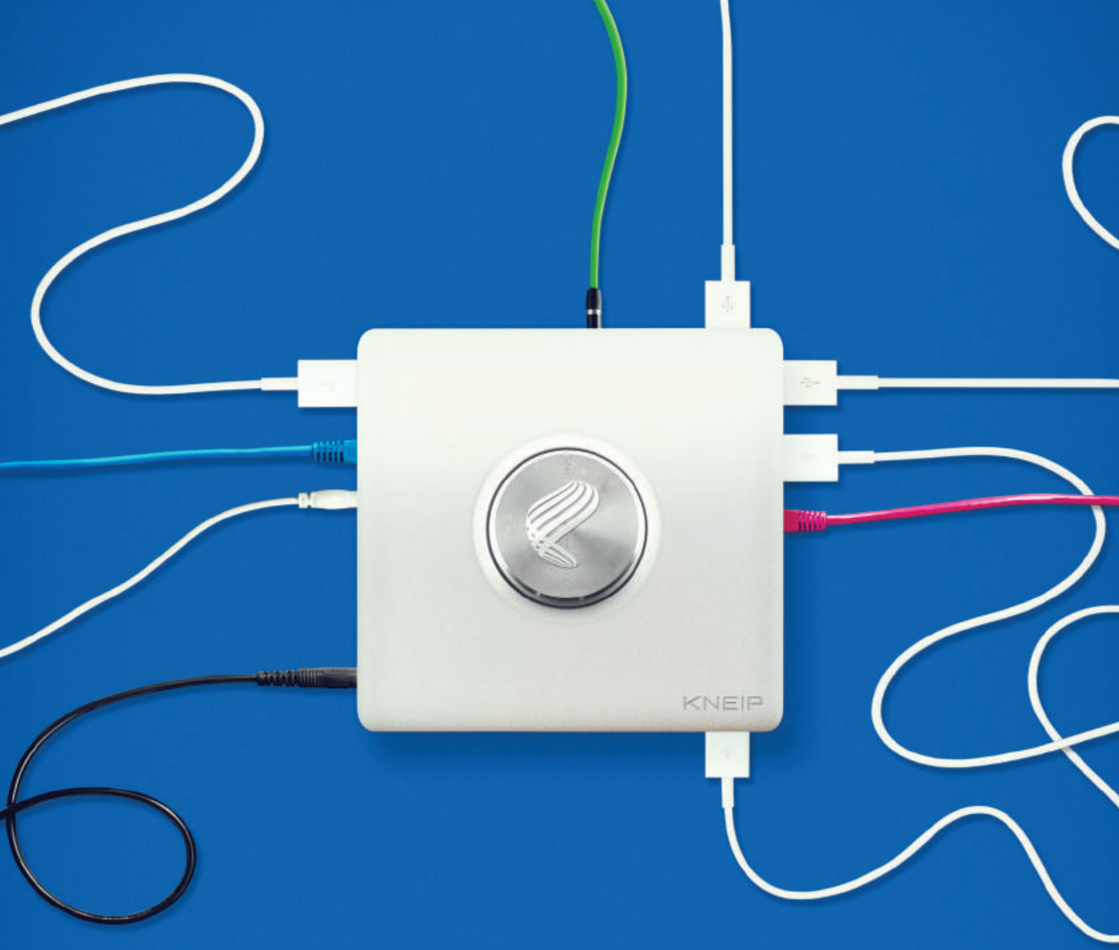

Data & Reporting

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Data Reporting

First data nerves

Why should a data management utility matter to you? Peter Moss of SmartStream makes the case

The concept of shared infrastructure is very familiar to all of us in the capital markets. There are numerous examples, including exchanges, clearinghouses and messaging networks. There are also great examples of whole business processes that have been outsourced to specialists that can provide a singular focus on one set of activities, do it really well and dramatically reduce complexity for others, such as fund administrators and custodians. So why has it taken decades for the concept of a shared data management utility to finally materialise?

It has been tried several times before, but never quite taken off for a range of different reasons, such as limited interest from a highly profitable industry, a business model that challenged too many vested interests, and perhaps, the lack of a champion to drive the initiative.

Now, in a market that is struggling to return to a sustainable level of profitability, the critical need for high quality reference data to support heavily automated business processes and accurate regulatory reporting has created the right environment for a utility to flourish.

There has been a huge focus over the last few years on automating trading activities and other business processes across the capital markets, making it easier to manage the growth in volumes, deliver on faster settlement times and generally improve the efficiency of our capital markets businesses. Much of that automation has been successful, but it has also revealed the inevitable truth that the automation is only as good as the reference data that supports it.

Almost every organisation has been searching for the best way to establish that 'golden copy', or accurate security master, so that automated processes run effectively throughout their organisation. There is a lot of data available from exchanges, brokers, data vendors and specialist providers, but unfortunately when you bring all of these data sources together, there are gaps and inaccuracies, and it is difficult to create a single consistent set and the means to easily cross-reference across it. The absence of effective standards has bitten us hard.

As a result, almost all financial institutions now have teams of data management professionals that take the readily available data from the market, load it into databases, normalise it to an internal standard, cleanse it, fill gaps in it and cross-reference it where practical, so that they have the best reference data possible to drive their automation.

This has been a multi-year approach with iterative improvements to the practices applied as teams have worked to eliminate the exceptions that arise from trade breaks and other automation failures.

The automation now works with very significant operational savings and supports business complexity that would probably not be practical if we were still reliant on manual processes. However, most organisations are now incurring quite substantial costs managing this reference data set and would like to see this cost reduced as well. The obvious approaches of outsourcing the data management teams or moving the teams to a cheaper location have been exhausted. Automation has been applied to the data management as much as investment budgets allow. So, where do you go for further savings? The answer is a data management utility.

While the investment in data management has paid off for many organisations, it has been done in a highly duplicative way, with every organisation working on its own, solving the same problems, duplicating the same activities and inevitably ending up with slightly different results. This is a problem that is best solved at an industry level, by the industry, for the industry. When Goldman Sachs, J.P. Morgan Chase and Morgan Stanley set out to establish the Reference Data Utility, they did so in the knowledge that this was a set of activities that would be best done once.

The Reference Data Utility has been established as a managed service that delivers complete, accurate and timely reference data for use in critical regulatory reporting, trade processing and risk management operations. It acts as a processing agent for its customers' selected data sources that sources, validates and cross-references data using market best practices, with an experienced global team who operate under the compliance frameworks of their customers. It is operational today with a number of customers taking the service and it is already delivering demonstrably better data than each individual organisation was able to deliver on their own. But the value of complete, accurate and timely reference data does not stop there.

Regulatory pressures

Over the last few years, regulation has dominated the agenda of most financial organisations. The need to comply has demanded their attention and a huge amount of effort has gone in to ensuring that the necessary regulatory frameworks are established, that reporting is accurate, and that the appropriate governance is in place.

The specifics of the regulation vary depending on the nature of your business but there are consistent themes that emerge: accurate reporting, transparency of risks and exposures, data aggregated across a firm, strong data governance and an acknowledgement that much of this depends on complete, accurate and timely reference data.

In the rush to achieve regulatory compliance, often within very tight timeframes, most organisations have once again looked to their internal teams to ensure that the necessary reference data is as good as it can be, duplicating activity across many organisations.

But the reference data that is required is a very natural extension to that required to make trade automation work effectively and a utility can quite simply do a better job, and do it once across the industry.

Is this relevant to you?

If you have a need for excellent quality reference data for financial instruments, either to support automated processes within your business or regulatory compliance, then it's time to start questioning whether you need to manage this data yourself. The industry has very successfully adopted specialist outsourcing for complex business processes such as fund administration and custody, perhaps it is time to do the same for data management, too. **AST**

NASDAQ FINANCIAL FRAMEWORK

The Nasdaq Financial Framework is Nasdaq's evolutionary and harmonized approach to delivering robust business functionality across the trade lifecycle to financial infrastructure providers in an open, agile environment. Standardized and unified operations coupled with unparalleled flexibility ensure that exchanges, clearinghouses and CSDs can go-to-market more quickly and cost-effectively, helping to boost their value proposition in an increasingly competitive marketplace.

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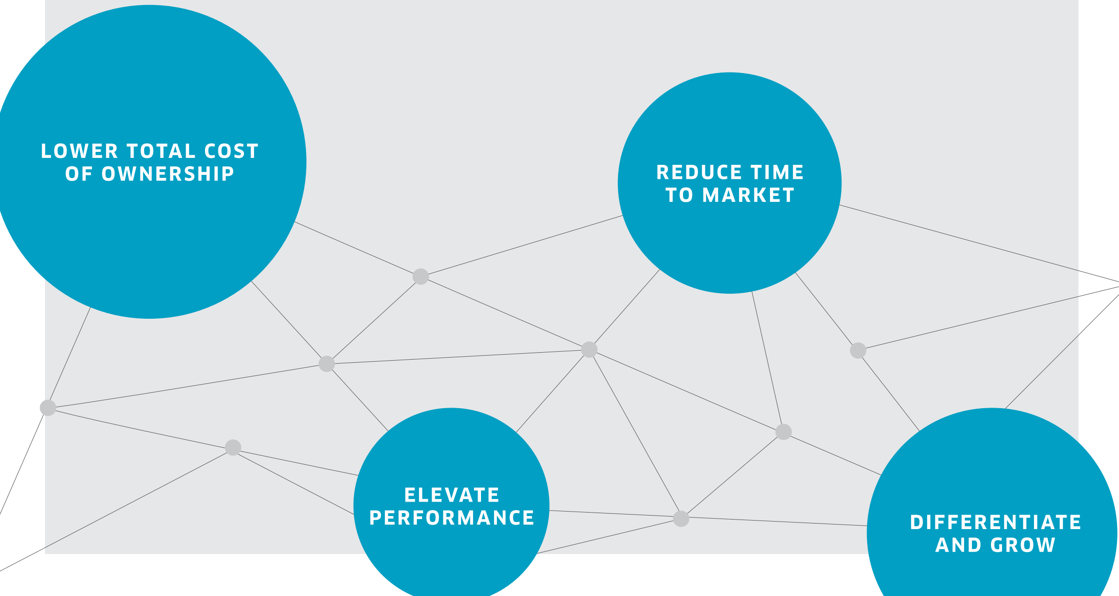
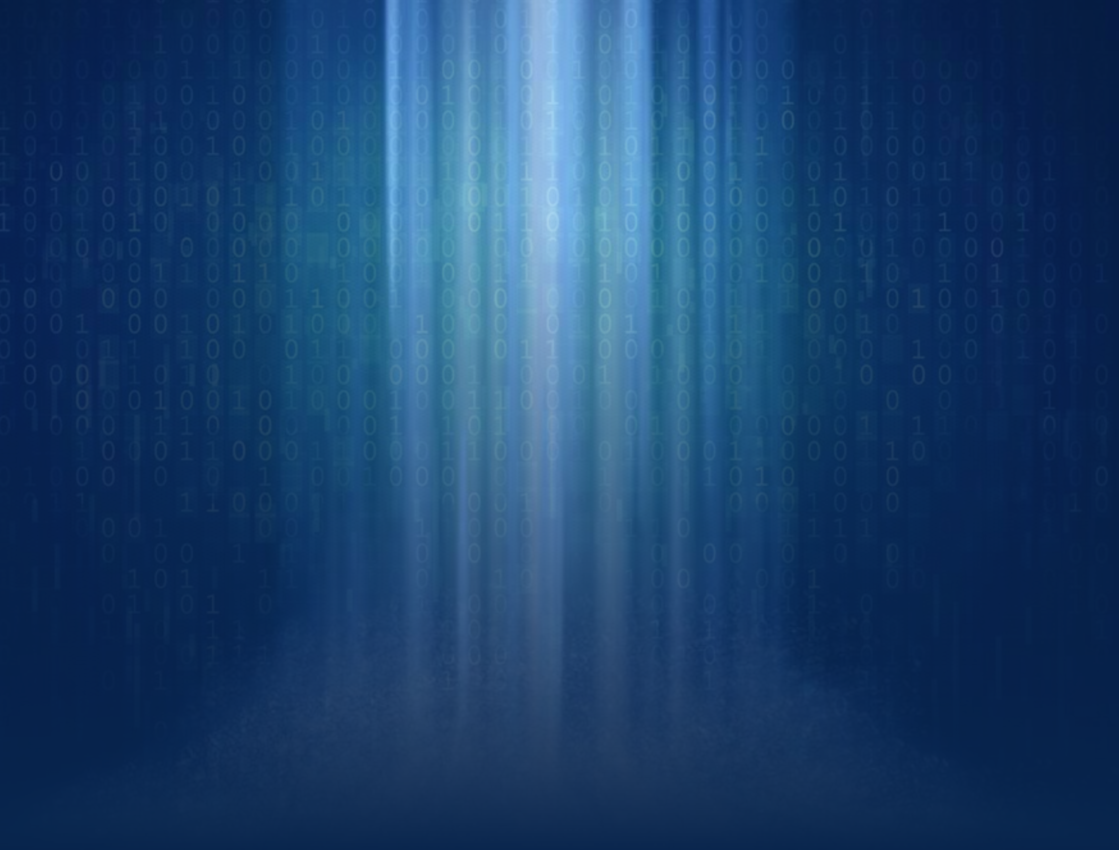




Keeping the data stream clean

There may be a regulatory mandate for good data governance, but the positive effects will stretch much further, says Lee Godfrey of KNEIP

Asset managers face many challenges, not least knowing who is responsible for the firm's data, and where its source is located. This requires having a proper data governance framework in place to control how and where data moves from the source to a range of various outputs required for regulatory and fund distribution purposes.

Of course, this is easier said than done. Data is like water: one can never control exactly where it is going, but one can at least funnel the majority of it and know where it's coming from. Speaking to the CEO of a US asset manager recently, when I asked how the group currently feeds data to its distribution partners, they did not know the answer. What we discovered was that, in fact, no one was doing it. A salesperson had signed a distribution agreement with a platform partner, set the fund products up on the platform and sent the necessary information, but then left it.

With the regulation on packaged retail and insurance-based investment products (PRIIPs) looming large and aiming to bring the fund management and insurance industries into the same orbit, control over the accuracy and consistency of fund data is paramount. Not only for regulatory reasons but also for credibility reasons. KNEIP uses the same data that goes to distribution platforms to send out to data vendors such as Bloomberg or Reuters, and to generate myriad legal and regulatory reports. By helping to control the movement of clients' data, KNEIP is able to improve the efficiency of its clients' sales teams.

If you tell a fund allocator, "Look at the great job we're doing", but then the fund buyer says, "On my terminals, the fund isn't doing as great a job as you state", then the first several minutes of that meeting are spent justifying and rationalising data discrepancies. This makes sales inefficient.

This was the case with one of our clients, and we found that not having to spend time explaining such discrepancies can increase a sales team's efficiency by 5 percent. A proper fund governance framework will—when a fund manager knows what the required output is—allow them to reliably source the data to produce the requisite output.

Rather than responding with a kneejerk reaction to each new piece of regulation and throwing everything at the problem, proper data ownership simply means adapting the dataset to produce a different output. The fund data that we send to Bloomberg, for example, already contains 71 percent of the data that satisfies the regulatory requirements of the PRIIPs key information document.

Quite often an asset manager will bring in one consultant to explain what the regulation is, another consultant to advise on how it might affect their business, then another to help put a request for proposal together, and yet another to put a solution in place to manage the integration process.

If you are smart about the long term, understand what data you already have and ensure that it is accessible and trusted, then it should just be a case of developing another output.

Aside from the sales inefficiency, poor data governance can lead to potentially serious fund performance implications. One of our clients, for example, sends out all of its funds' dividend data, but not the dividend payment intervals.

In short, the dividend payment interval on data vendor terminals said that a particular fund paid twice a year when in fact KNEIP was sending them the client dividend data four times a year.

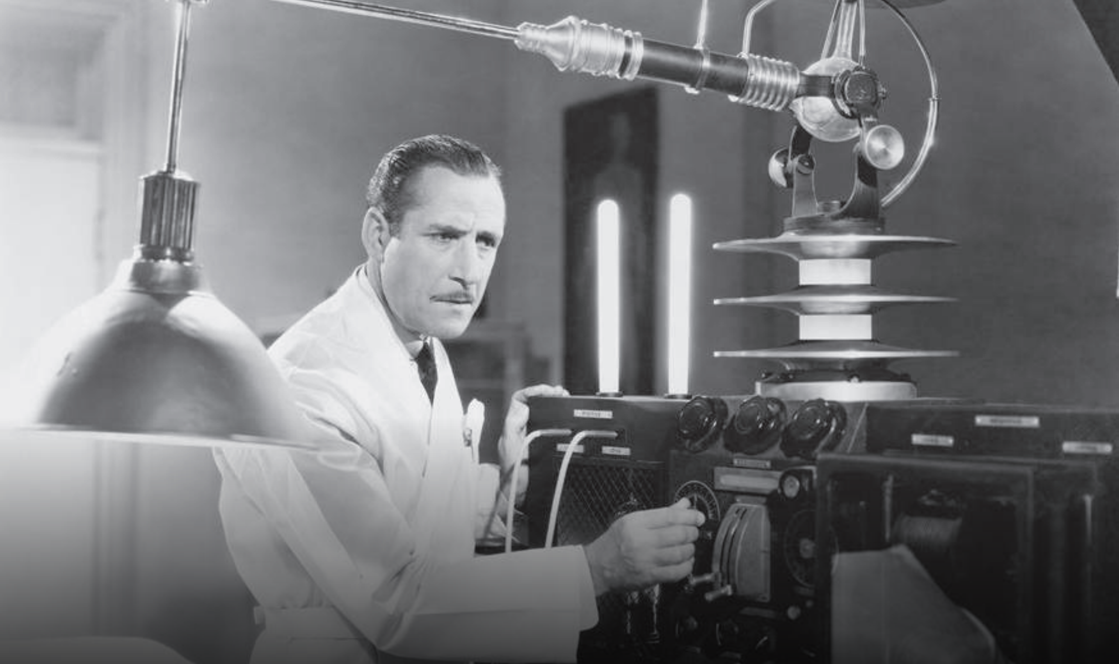
As a result of this, the payment interval was perpetually incorrect and Bloomberg was only picking up two of the four dividend payments, which made the fund's performance consistently below its benchmark.

Companies that avoid such issues are those that recognise the need to have a data governance strategy in place and not just a chief data officer, as you can't centralise data ownership. A robust data governance process can fix the root cause of long-term data issues. **AST**

Poor data governance can lead to potentially serious fund performance implications

Lee Godfrey
Deputy CEO
KNEIP

Regulation Technology



History is written by the innovators

History has demonstrated that technology in financial institutions has not only kept up with the times but enabled the introduction of innovative products, says Ghassan Hakim of Riva Financial Systems

How important is having the right technology in place to helping financial institutions to comply with regulations?

Technology has played a key role in financial institutions for decades, enabling straight-through processing, stricter controls, strong audit trails, increased data quality and integrity, and back-office efficiencies, along with compliance with ongoing regulatory changes. This technology has evolved over time, ranging from the large legacy mainframe systems to the more mobile and agile infrastructures.

History has demonstrated that technology in financial institutions has not only kept up with the times but in many ways enabled the introduction of innovative products, while maintaining strict compliance with the ever-evolving regulatory landscape. Having the right technology is very important, but we would argue that the right technology has always been in place for the financial services industry.

Are 'regtech' providers getting enough support from the regulators themselves? Does this differ by jurisdiction?

Technology has been the backbone of the financial services industry for decades, so while everyone seems to be more focused on the fintech and regtech trends, data reporting and compliance reporting and controls have always been there. The names are new, but the underlying results have always been the same.

Both fintech and regtech are taking advantage of more agile or mobile solutions that bring results to end-users in a much faster way. The question is more about the regulatory agencies and whether they are keeping up with the rapid technology changes in the industry.

The answer is yes and no. Clearly regulators are very conscious of new technology and have demonstrated their desire to understand and leverage it.

However, it is clear that in the setting of deadlines, some regulators do not necessarily fully appreciate the technical changes required to multiple core and satellite systems. More and more regulators are allocating additional budgets in support of the new technology. They are hiring specifically skilled individuals that will help them understand and adapt to this new technology.

But we believe regulators are reluctant to move too quickly, like with blockchain, in an effort not to jeopardise the strong rules that are currently in place.

The aggressiveness or lack of will differ by jurisdiction, with the larger fund centres being more open to work with regtech providers.

How big a part does artificial intelligence and machine learning play in regulatory technology? How big a part could it play in the future?

Artificial intelligence and machine-based algorithmic trading systems are already playing a significant role in world equity markets, handling very large trading volumes and almost making the traditional floor trader obsolete.

The applications of artificial intelligence specifically in regulatory technology is at the early development stages and its transformational impact is still to be understood. We believe the same is true for machine learning, although we could see some more practical regulatory application in the back office, such as through the monitoring of market timing, suspicious trading activity, fraud, money laundering and various scams.

With the advent of fintech, regtech, robo advisors, driverless cars, Uber and the like, it would only be safe to state that artificial intelligence and machine learning are more than likely to play a transformational role in regulatory technology.

How do you see financial and regulatory tech changing the financial services industry in the next five years? Will financial institutions also have to be technology companies?

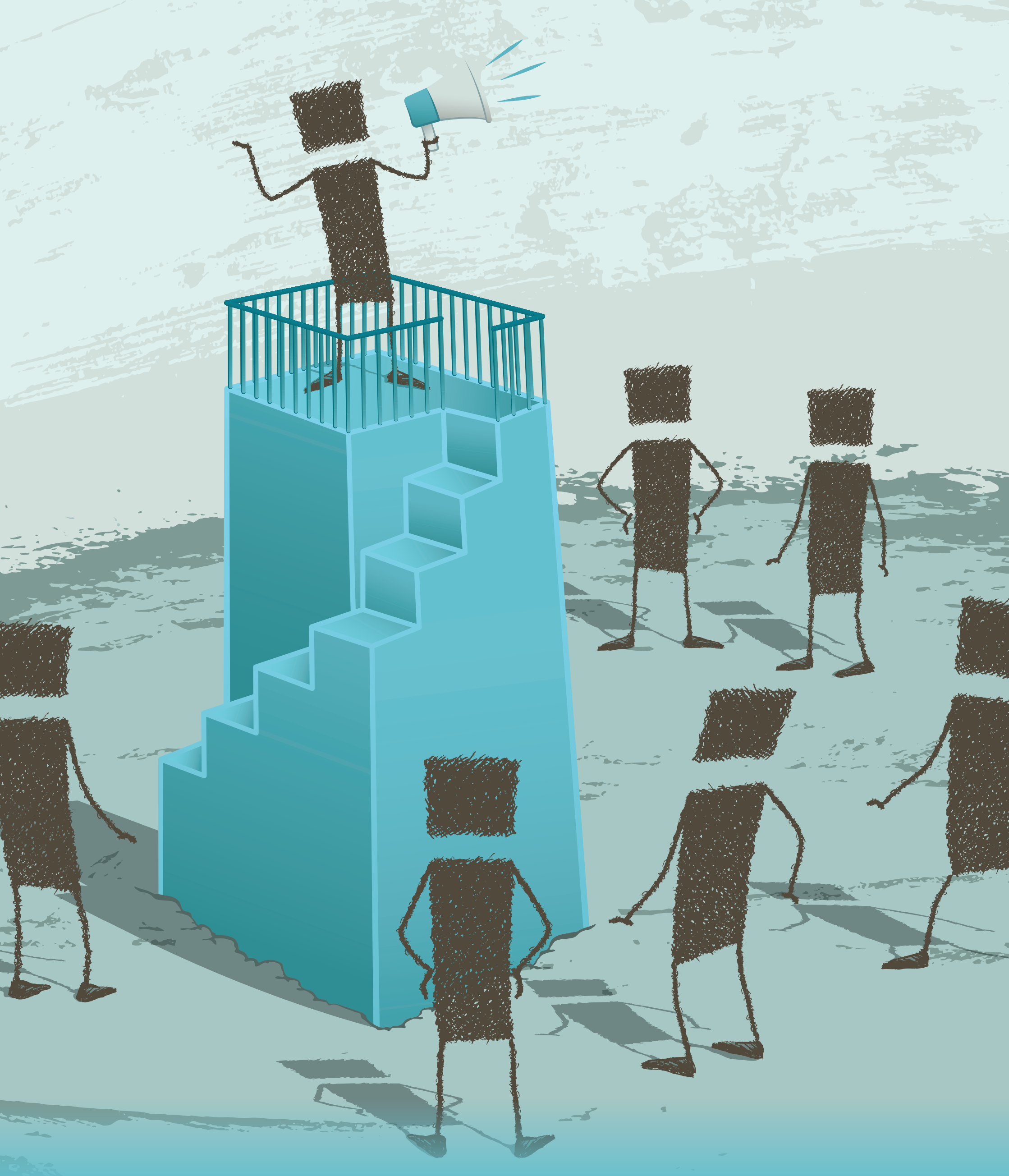
If anything, we are witnessing change at faster rates. However, one aspect of the financial services industry regulatory landscape that is very likely to be affected is the global convergence of regulators. A good example could be the use of blockchain within financial services. It is widely recognised that distributed ledger technology will potentially disintermediate many of the standard processes we see today, but without agreement on its use by regulators, the uptake of this burgeoning technology could be significantly slower that the industry would hope.

"Distributed ledger technology will potentially disintermediate many of the standard processes we see today"

Ghassan Hakim
CEO
Riva Financial Systems

As a result, should financial institutions become technology companies?

Well, some already claim they are but, for the most part, financial institutions should remain focused on their core business while partnering with fintech and regtech providers. **AST**



Stop, collaborate and listen

Technological disruption may not be happening as quickly as some like to say, but asset managers and regulators still need to work together to manage it effectively, says Tim Lind of Thomson Reuters

How disruptive is disruptive technology?

A lot of the innovation we're seeing at the moment is directed at the retail audience. Some technology vendors are getting involved in capital intermediation, developing platforms to allow investors and small-cap firms to access capital directly, but generally I don't see a lot of disruptive technology at a wholesale level.

Custodian banks, broker-dealers and fund services companies are all core transaction entities working on legacy systems, and I don't see those legacy systems going anywhere.

Any innovation here will be around the edges. Some vendors are looking at trade reporting technologies, or semantic technology for reading regulatory rules and passing it through a workflow engine, but this is not necessarily disruptive.

Cognitive computing related to managing regulatory change will not replace legal and compliance staff, but it will make them more effective at their jobs.

Even blockchain has been around for at least five years already, and it could be another 10 years before anything comes out of it that's practically useful.

I don't think you can call anything a disruptive technology if it takes 15 years to evolve.

We do need to focus on innovation and investment, and on challenging old models, but I think the practical impact of that will be small, at least in the near-term.

Fintech companies are focusing on four areas: crowd funding; peer-to-peer lending and low-value payments; robo-advice, whereby investors are going through algorithms and electronic means to figure out how to best allocate their investment money; and blockchain, which is the only one that really applies on an institutional wholesale level—clearinghouses and securities repositories, in particular, are looking into this.

The retail consumer is typically free of legacy, but in the corporate banking model, most of these technologies can only modernise the legacy, core transaction processing, settlement and payment systems. I see no suggestion that any of that is going to revolutionise or replace legacy transaction systems.

Will these small innovations add up to bigger changes? Will the fintech space look different in 10 years?

In 10 years we will likely have the same well-capitalised, well-regulated institutions that have global distribution and global stability. I don't see the focus on financial technology changing the wholesale interactions between the main players.

There is a lot of hype around fintech, but we are still bound by the same core legacy systems and a lot of the fintech developments have not yet caught the eye of the regulators.

If you're going to offer services to investors, pensions and mutual fund investors in the institutional world, they're going to have to be regulated and have the large capital base and scale that allow them to be regulated.

Investor advocates will demand that robots are fiduciaries and that any party offering banking or credit intermediation should have the same controls and oversight as traditional banks. The potential for fraud, risk and financial crime is too large to ignore.

I don't think we're going to have a whole different cast of banks 10 years from now, and I certainly don't think banking itself will be replaced by low-cost payments, peer-to-peer lending, or other shadow banking internet technology by then.

To what extent can improving technology help banks with regulatory compliance?

There are incremental changes that everyone has to make to try and improve automation.

There is so much work to be done to manage trade reporting requirements under the second Market in Financial Instruments Directive (MiFID II), for the liquidity coverage ratio, and for high-quality liquid assets, forcing institutions to consider how they're going to go about proving to regulators that they understand the liquidity of the instruments they hold.

The regulatory agenda is also bringing in the likes of the fundamental review of the trade book and the next evolution of Basel capital requirements, all of which is going to be fairly onerous for market participants.

The innovation we're seeing here is at the edges—it won't replace core systems and processes, but it might allow firms to deal with the collection of data more efficiently.

A lot of the technology that we see emerging is in trade reporting, middleware, and tools to make trade reporting more integrated.

However, we don't see many organisations with the capacity to view all of the compliance issues in a broader context. They're so focused on meeting a deadline that it's a luxury to be able to think strategically about all the requirements across a number of regulations at the same time.

There aren't wholesale reviews of core systems in order to support all those activities at once, but I would expect that to be a tactical process over the next few years. These are all very near-time compliance challenges, so it's hard to imagine that there will be a lot of capacity left to work on completely new and innovative technologies.

Aside from the reporting aspect, we are also seeing emergence of semantic linguistic technology that can read legal terminology and interpret who it is the rule is targeting, who needs to take action, and how institutions should interpret the rule.

The fundamental challenge is that financial regulations are written by lawyers and policymakers, and somewhere along the way they have to be translated for an IT specialist, who will have to make a trade report to classify the liquidity of an investment. IT, legal and operations staff in one bank will interpret rules differently to those in another bank as they develop their processes—and regulators don't have a helpdesk you can call to clarify the meaning, or intent, of any particular phrase.

Technology that has the ability to break down and interpret hundreds of pages of regulatory text could help both regulators and banks to create a more consistent outcome with regards to compliance.

What about blockchain? That has caught the eye of regulators, hasn't it?

The UK and Australian regulators, for example, are both looking at ways to promote financial technology vendors and to give them the power to convene academics, consultants, technology experts and practitioners to discuss what kind of technology will help banks comply with new rules.

Collaboration is going to be essential, and addressing regulatory uncertainty will be key to fostering fintech innovation

Tim Lind
Global head of financial regulatory solutions
Thomson Reuters

Everyone is struggling with lower margins and limited resources, and these regulatory challenges are going to occupy the budget in the near term.

Collaboration is going to be essential, and addressing regulatory uncertainty will be key to fostering fintech innovation, which in turn creates jobs and efficiency in our industry. Specifically regarding blockchain, most of the development here is going to focus on clearing and settlement, or perhaps in trade confirmation. We have seen firms that already have a strong presence with the asset manager, broker-dealer or custodian working on using blockchain for trade confirmation.

They're taking a distributed set of information and working through a collaborative process to agree on the terms of the trade.

At the same time, institutions have to clarify the way they classify products such as over-the-counter (OTC) derivatives, because they're going to have to be reported under MiFID II.

We've been talking for years about how to structure OTC derivatives in economic terms, and that's all being accelerated now by MiFID II.

Helping traders of derivatives to agree on the economic terms of a trade, and to share that with a clearinghouse or swap data repository in a collaborative way, seems like a reasonable area for blockchain to focus on.

And there are proof-of-concept developments out there, but actually, in terms of real, tangible direction, I haven't seen anything that is fully tested, to scale and ready to be commercialised, yet.

There is also an issue around how an asset servicing bank practically integrates the blockchain systems with its legacy platforms.

'Legacy' tends to be used as a pejorative, but achieving the title of 'legacy' just means that a system has worked for a long time, even if it's suboptimally.

How do you transform that legacy infrastructure and start to use blockchain within core banking operations? It will be a dramatic change.

I'm not cynical. I like the focus on innovation.

When there are people thinking about new ways to operate that can never be a bad thing, but we also have to be practical and not allow those developments to distract us from near-time priorities such as the regulatory agenda.

Do advances in technology mean the role of the regulator is changing?

Some are running 'sandbox' initiatives to provide fintech companies with a safe space to test and develop their products.

That calls upon them to engage with the fintechs, to advise on the regulatory hurdles they're likely to encounter as they develop a new capability or technology, and to give advice in the early stages. That input can be invaluable.

However, regulators tend to be very comfortable in supervisory duties, less so in advisory roles.

As the banks and financial services firms develop more skills in a technology capacity, the regulators will have to develop their skills as well.

Often, the regulators are as burdened by the regulation as those they regulate.

But, make no mistake, the effectiveness of prudential regulation will absolutely depend on a high degree of collaboration between regulators and industry practitioners.

What are banks doing in terms of education? Are they prepared to teach regulators what they need to know?

Banks aren't just looking to write their own rules, they are looking to educate regulators about their business, technical challenges and unintended consequences. Effective reform is only possible if there is a degree of trust and communication.

There has to be objectivity in the engagement between regulators and those that are regulated. The regulator can't be seen as granting undue access to any one firm. It will all have to be very transparent.

But, although better engagement between the two communities is something we haven't seen much of before, I think the concept of early-stage engagement from the regulators is a very important one, and we are moving in that direction. **AST**

Central Securities Depositories

Choose wisely

Nasdaq Market Technology’s Henri Bergström outlines the best practices for evaluating central securities depository technology in a capital markets landscape that is being redeveloped by regulation

The time has come for central securities depositories (CSDs) to replace their legacy core solutions, many of which date back to the 1990s or even earlier. Most of these organisations built their solutions in-house, but this time around they are considering offerings from external vendors. Here are some factors and best practices to consider to make the request-for-proposal (RFP) process and the ultimate selection of a solution go as smoothly as possible.

Legacy CSD solutions are struggling to keep up with the demands of today's financial markets. New participants and customer groups are coming in, so the need to integrate and connect has increased significantly. CSDs need to link with other CSDs to exchange collateral or to serve the needs of investors' regional or global strategies, for example.

Older solutions do not support straight-through processing because they rely on proprietary messaging for managing transactions and exchanging information between the participants and the CSDs.

enabling CSDs to accelerate the time to market for new products and services, and increase the efficiency of IT and business processes.

Best practices

CSDs should consider a few best practices when searching for a new solution. For starters, it pays to be vigilant in researching the market before entering the RFP process. CSDs often send an RFP to several vendors even though most of them do not have a suitable offering.

That makes it difficult, costly and time consuming for the CSD staff, who are already struggling with their daily workload, to make a selection. It is worth sending out a simple request for information (RFI) before the RFP to cut down the shortlist.

Look at the vendor's track record and its success rate in delivering technology. Nasdaq's methodology includes doing a design study under a separate agreement with the CSD.

A best practice is to think about forward compatibility and the potential for the solution to add new services and emerging tech

Henri Bergström
Head of product management for CSD technology
Nasdaq Market Technology

Further, the hardware may rely on mainframes or AS 400 technology supported by an old stack of technologies, which is difficult and expensive to maintain.

Implementing new technology that utilises international standards will enable CSDs to increase operational efficiency. The total cost of ownership of modern commodity hardware, middleware and open source components is far lower compared to legacy systems. More advantages come from new technology,

This gives the CSD an opportunity to become more familiar with our offerings, and it gives us an opportunity to learn more about the specific requirements and manage their expectations

The CSD can then decide whether to move forward with an actual delivery project at a fixed price and under a specific timeline. CSDs have a commitment to provide services to the financial markets, and reliability is imperative. To this end, they should team up with a vendor that offers 24/7 support.

It is even better if the vendor fully understands the business not only from an IT perspective, but also the industry trends and the particular CSD's strategy, goals and plans for the future.

If the vendor can provide integrated solutions for other parts of the organisation, that is also a big plus, because many CSDs are vertically integrated with other players in the value chain, such as central counterparties.

Looking to the future

When doing a technology replacement, that is also the perfect time to reevaluate and change processes as well as products and services that are being offered to customers.

CSDs should consider what capabilities and capacity they need today and in the future, based on their strategy and business development plans.

If both are not done together, they run the risk of being disappointed with the result.

With that in mind, CSDs should look for a solution that offers the flexibility to gradually implement business applications, such as a new settlement engine, and then deploy other business applications when they need them.

For example, if there is a change in ownership or governance structure, such as when a CSD is bought by an exchange, business applications can be added upon need instead of buying or building a new solution.

The solution should have tested, proven, robust and resilient connectivity components built on top of the architecture and core service that can interface and integrate with other internal and external solutions.

It should be built to share core services such as the reference data dictionary so it is easy for participants to interact with them.

A single graphical user interface and single IT operations service would enable efficient deployment of the full stack of solutions or business applications. Importantly, the solution should also have in-built authorisation, authentication and blocking factors to achieve cyber security.

A few emerging technologies could have an impact on CSDs in the future. Forward compatibility—where the system is designed to fit with planned future versions of itself—is crucial in an environment where IT innovation is occurring an exceptionally rapid pace.

Blockchain, for example, could have a significant impact on the financial markets depending on how it is implemented.

That said, it is very early days, so it may make sense for CSDs to start small and look for new revenue streams or efficiencies that can be created by using blockchain.

Nasdaq has done some successful proof of concepts of blockchain in e-proxy voting and in the Nasdaq Private Market.

Other technologies that should be on CSDs' radar include cloud services, machine intelligence, quantum computing, micro services and virtual reality.

All of these could be used to gain an advantage over the competition.

Ultimately, the build-or-buy decision hinges on many factors including costs, available resources and timeframe.

Doing upfront research before the RFP process to learn about prospective vendors' track records, support services, understanding of the business, and industry trends and other capabilities, can result in a strong shortlist of contenders.

Taking a hard look at processes, products and services at the same time as doing the technology replacement provides an opportunity to make changes that will enable CSDs to thrive in a highly competitive environment.

Finally, a best practice is to think about forward compatibility and the potential for the solution to add on new services and implement emerging innovations that enable CSDs to execute their strategy for the future. **AST**

To protect and service

As a regulated entity, KDPW exists to serve financial institutions. Iwona Sroka explains how it fulfils this role

Thanks to the introduction of services offered by KDPW, the Polish central securities depository (CSD), and KDPW_CCP, the clearinghouse, the quality and safety of the Polish financial market and its attractiveness to international investors have been strongly improved. KDPW Group offers the services of an authorised central counterparty (CCP), including over-the-counter clearing, a registered trade repository and a global numbering agency, as well as legal entity identifier (LEI) assignment.

But these post-trade solutions are not only offered for the domestic financial market. With its European authorisations and registrations, KDPW Group is open to foreign clients. Raiffeisen Bank International has opened an omnibus account direct in KDPW.

ABN AMRO Clearing Bank, KDPW_CCP's first foreign participant, began to clear transactions on the Warsaw Stock Exchange's cash and derivatives market in June 2016.

As a general clearing member of the KDPW_CCP, ABN AMRO opens up access to the Polish capital market for investors using the bank's global post-trade services. KDPW Trade Repository has participants from the UK, Italy, Czech Republic, Bulgaria and Romania.

Clearing services

KDPW_CCP is authorised under the European Market Infrastructure Regulation and has broad experience in extending the scope of its services.

In view of its current levels of trade clearing and taking into account future volume growth and the potential to offer its services in the Central and Eastern Europe region, KDPW_CCP holds the necessary level of capital, which currently stands at €54 million.

A CCP's own capital is the last line of defence in the face of member insolvency and the higher the capital of the CCP, the lower the risk exposure of the remaining members.

The clearinghouse performs a broad range of services in the financial market. For the regulated market, KDPW_CCP clears equities, fixed income and other cash market instruments, as well as derivatives such as futures and options based on indices, equities, bonds, currencies and interest rates. It also offers clearing of securities lending and borrowing and derivatives from the inter-bank market.

KDPW_CCP has provided a service for the clearing and guarantee of OTC derivatives and repo trades, known as OTC_Clearing, since December 2012. KDPW_CCP began in this way to process inter-bank trades, mainly aiming to reduce the risk of default by trading counterparties and, consequently, to generate growth in this market sector.

alternative trading system implies improved operating standards of the clearing process, resulting in a significant reduction of the number of instructions sent for settlement while reducing the cost of trade settlement.

Risk management access application

Last year, KDPW_CCP, in collaboration with the Warsaw Stock Exchange, launched the Risk Management Access (RMA) application for all entities that clear transactions on the exchange. RMA allows all clearing members and brokers that provide clearing services to define maximum limits on the value of orders

KDPW_TR was one of the first trade repositories in Europe to be registered by ESMA

Iwona Sroka
President and CEO
KDPW and KDPW_CCP

KDPW_CCP has added new types of acceptable collateral to its service, including collateral posted as margin or contributions to funds, both in organised and non-organised trade.

The new functionality added to the existing collateral management structure include contributing cash in EUR as well as bonds denominated in EUR as collateral.

The Polish clearinghouse offers a netting mechanism that allows KDPW_CCP to generate one settlement instruction sent to KDPW or another settlement institution (for securities and/or cash settlement) for all operations that credit and/or debit a designated settlement account.

The implementation of netting and aggregation (directional netting) of debits and credits in securities arising from cleared transactions concluded on the regulated market or in an

entered by an exchange member whose transactions it clears.

The RMA application allows users to configure filters and offers a kill switch functionality, which blocks new orders of an exchange member and cancels the member's orders already on the order book.

Trade repository services

KDPW_TR was one of the first trade repositories in Europe to be registered by the European Securities and Markets Authority (ESMA) in confirmation of compliance with all international standards, which guarantee the highest quality of service.

KDPW_TR has participated in the implementation of EMIR from the very beginning and is engaged in active dialogue with all market participants.

KDPW_TR aligns its services with legal requirements and ESMA guidelines, and follows the needs of market players covered by the reporting obligation.

The strengths of KDPW_TR are:

- Secure certified access to the application;
- User-friendly intuitive website interface with reporting functionalities and direct access to maintained data;
- Global communication standards, including XML messages and dedicated message queues;
- Easy access to support of highly qualified experts; and
- Existing procedures applicable in the event of contingencies, solutions ensuring the highest security standards and business continuity in data collection and maintenance (including a back-up site).

KDPW_TR also offers the reporting of derivatives trades via a user-friendly secure website interface or over automatic direct connections. Derivatives trades are reported in messages developed in line with the scope of information required under the EMIR technical standards.

They include all data necessary for the trade repository to identify trades and process reports as required by ESMA. KDPW_TR is authorised to accept reports for all classes of derivatives on all markets.

LEI assigning

On 19 August 2013, KDPW was assigned the prefix 2594 that was necessary to issue LEIs to legal entities.

The prefix identifies LEIs issued by KDPW in the global LEI system. The Polish Financial Supervision Authority was the sponsor of KDPW's prefix.

According to the LEI Regulatory Oversight Committee's decision of 27 December 2013, KDPW became a local operating unit authorised to issue LEIs. Since then, KDPW has issued approximately 6,500 codes to entities in more than 20 EU member states.

The main advantages of the KDPW LEI service include:

- Customer service in English and Polish;
- Competitive fees for the issuance and renewal of LEIs;
- Prompt processing of orders;
- Individually dedicated account managers for each order, which are available to the client at every step of the application verification process;
- Automatic communicating of all events in the processing of orders; and
- Highly competent staff dedicated to customer service and an excellent understanding of the specificity of the Polish capital market including local legal requirements.

KDPW's secure online application process is offered in Polish, English and Romanian.

This easy and intuitive interface provides the following functionalities to LEI holders:

- Access to LEI management services;
- Filing applications for the issuance or transfer of an LEI with KDPW;
- Review and processing of issued LEIs, including data updates and corporate actions;
- Review of order history including payment details;
- Downloading invoices;
- User account management;
- Automatic communication with KDPW;
- Review of the details of entities holding LEIs; and
- Access to detailed information on LEIs and LEI issuance.

Numbering agency services

KDPW is the only institution in Poland and one of few institutions in Europe to offer such a broad range of numbering services for financial market entities and instruments.

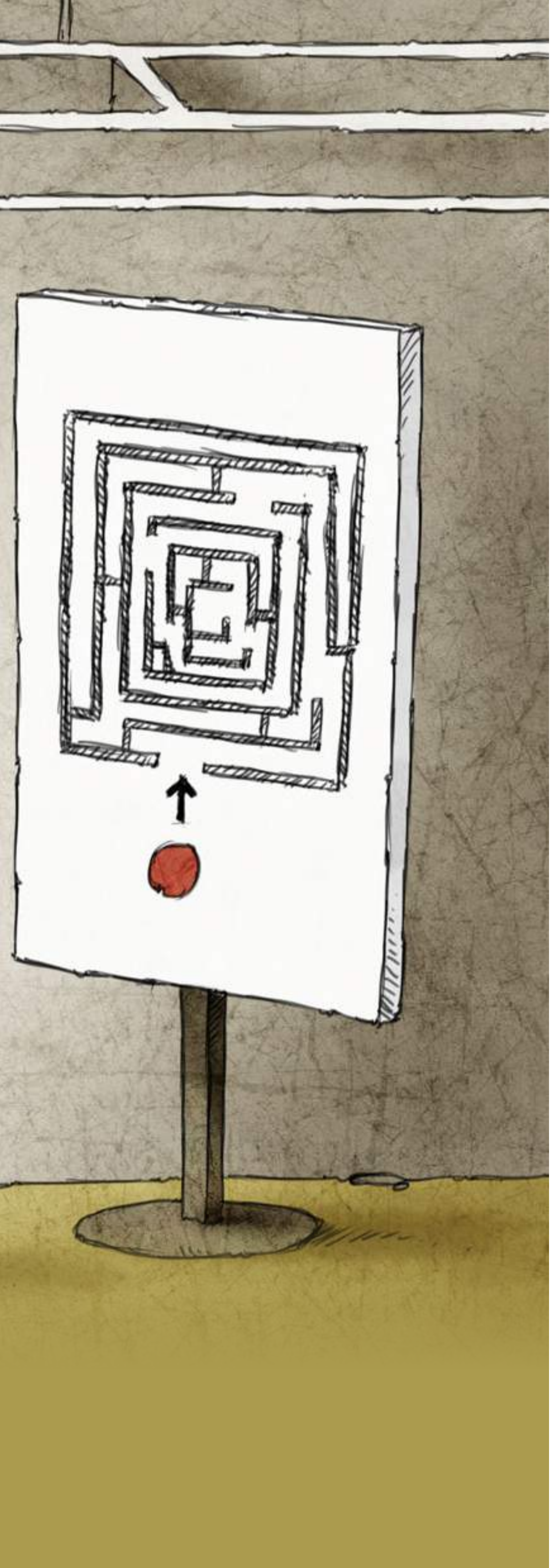
KDPW assigns the ISIN, CFI and FISN codes.

Since 1994, KDPW has been a member of the Association of National Numbering Agencies, and since 1996 plays the role of a national numbering agency. **AST**

Collateral Management

The regulatory maze

As the regulatory burden has increased, new general collateral trends are starting to emerge, and market participants should be prepared to manage them, according to BNY Mellon



Since the 2008 financial crisis, policymakers have been formulating numerous domestic and international regulations, the implementation of which are designed to minimise and contain the market-wide impact of a single participant's failure. These changes are intended to improve the financial sector's ability to absorb shocks arising from financial and economic stress and to reduce the risk of contagion from the financial sector to the rest of the economy. An 'incomplete maze' is one way of describing this new regulatory landscape. The aerial view, while complex, shows possible routes together with paths that are still under construction.

The European Market Infrastructure Regulation (EMIR) on over-the-counter derivatives and central counterparties (CCPs) and the US Dodd-Frank Act comprise one section of this maze. EMIR came into force in Europe in August 2012 (with stages of implementation up to 2016) and Dodd-Frank in the US in July 2010.

These regulations reflect the G20 countries' commitment to transparency and safety in the marketplace, stating: "All standardised over-the-counter (OTC) derivatives should be traded on exchanges … cleared through central counterparties … and that OTC derivatives contracts should be reported to trade repositories".

EMIR and Dodd-Frank affect collateral in a variety of ways including requiring the use of a CCP by buy-side institutions for cleared OTC derivatives, increased focus on collateral segregation and account structure strategy, and a focus on collateral eligibility and its availability for use to meet minimum eligibility criteria.

Along with EMIR and Dodd-Frank, there is the Basel III liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) requirements. One key focus of Basel III is to address the risk of a run on a bank by requiring differing levels of assets for different forms of bank deposits and other borrowings. This focus on bank funding has resulted in the introduction of two complementary tools to monitor, strengthen and promote global consistency in liquidity risk supervision, the LCR and NSFR. As banks are required to hold increasing amounts of unencumbered high-quality liquid assets (HQLAs), this is likely to reduce the available securities in use for collateralised funding and margining purposes. This is likely to increase the need for more expensive unsecured funding, or remain secured but with a more diverse range of acceptable collateral.

Basel III also introduces a capital surcharge for institutions identified by the Financial Stability Board (FSB) as global systemically important banks (G-SIBs). The increased capital requirements of G-SIBs are designed to result in enhanced financial robustness of key market infrastructure providers, with the resultant increase in client security.

Yet another regulation affecting the collateral landscape comes from the Basel Committee on Banking Supervision and the International Organization of Securities Commissions's margin for non-cleared OTC derivatives, which outlines the requirement to exchange variation margin and initial margin between transacting counterparties. Firms will now need to calculate initial margin according to their chosen margin models and will need to apply complex risk data to that. They will also need to establish policies, procedures and controls for minimising disputes by reconciling portfolios, risk sensitivities, risk factors and margin calls with their counterparts.

The Solvency II Directive addresses the amount of capital EU insurance companies should hold to reduce the risk of insolvency. Its key objectives are improved consumer protection, modernised supervision and deepened EU market integration. The implications of this regulation include the potential impact on a firm's investment performance due to the need to hold assets for use as collateral. In addition, with increasingly complex collateral requirements, it is likely that insurance companies will need to develop more sophisticated collateral solutions such as collateral management and repo desks.

The second Markets in Financial Instruments Directive (MiFID II) is another regulation with an impact on collateral. MiFID II is the EU legislation for investment intermediaries. It aims to reduce systemic risk and strengthen financial stability. With MiFID II there will be an increased focus on collateral requirements by smaller institutions requiring collateral services. In addition, we are likely to see increased client reporting requirements leading to an increase in operational costs.

The EU's UCITS V directive allows collective investment schemes to operate freely on the basis of a single authorisation from one member state. One impact of this regulation will be the possible reduction in the level of securities lending activity among some UCITS fund managers because of reduced revenue opportunities. In addition, traditional repos are being replaced by a variety of financial derivatives such as total return swaps.

Finally, the Financial Stability Board Banking Report specifies the regulatory framework for haircuts on certain non-centrally cleared securities finance transactions (SFTs) with non-banks against collateral other than government securities, and introduced a framework for haircut floors for non-centrally cleared SFTs. Changes in the funding practices (and funding cost) of SFTs may result in a greater cost of funding—with a consequential direct impact on a firm's profitability. As a result, for lower quality and longer-dated securities involved in SFTs, it is likely that there will be less funding sourced, given the increase in collateral haircuts.

With all of these new regulations, general collateral trends are emerging. There is now an increased use of non-cash for collateral purposes and a longer maturity of collateral-related transactions, and greater levels of collateral are being required for use at CCPs. In addition, the market now offers increasingly sophisticated collateral management solutions to ensure enhanced collateral efficiency and ultimately collateral optimisation.

In addition to these general collateral trends, regulation is also having a direct effect on financial market participant behaviour—how they are organised and how they operate. For example, regulatory changes are becoming intrinsically linked to an organisation's risk management function across all market sectors. The risk department within an organisation is becoming the kingpin to the operational, trading and regulatory activities of the firm, driving all of their collateral-related decisions. It is also evident that there are increasing numbers of asset managers, insurance companies and pension funds developing greater levels of awareness in collateral management. EMIR and Dodd-Frank have required a large-scale market move by the buy side to adopt solutions to enable them to clear OTC derivative transactions through CCPs.

In addition, for buy side-to-buy side trades involving a broker-dealer principal, regulations are also appearing to change market behaviour with participants seeking to avoid the cost of capital for certain types of trades. Market participants may look to alternative transactions that allow counterparties to be fulfilled but without the broker incurring prohibitive capital cost that would negate the transaction.

For those involved in stock lending, there is a growing trend for securities to be taken as collateral against stock rather than receiving cash collateral. This provides the advantage of a lower balance sheet charge to the counterparty under Basel III.

Paul Traynor, head of BNY Mellon's insurance and pension segment for Europe, the Middle East and Africa at BNY Mellon, has a view on this.

He says: "Some buy-side firms are showing sophistication in the area of collateral management. Large insurance companies show positions and collateral movements automatically and are informed of the consequences of interest rate movements. These organisations are combining collateral management and treasury functions and undertaking collateral optimisation, with the fund manager taking into account how the financing desk uses their own balance sheet."

To help navigate the regulatory maze, many market players are increasingly embracing a 'forensic' approach to analyse the full cost of each transaction. For each trade, this means gaining a thorough knowledge of factors such as capital and collateral costs as well as the costs of transacting settlement and services.

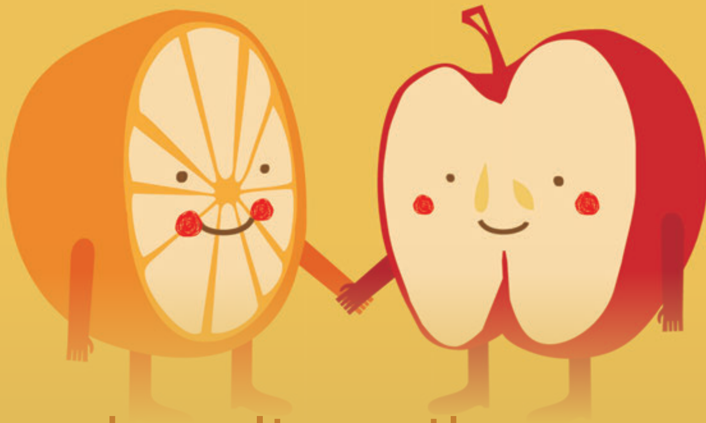
Market players should also consider compiling an impact analysis checklist to determine their collateral fitness.

For example, they should consider: whether they know all the collateral impacts on their business, both direct and indirect; understanding the threats and opportunities; the collateral options available to them; and the steps they need to take next.

These key collateral questions can help market participants determine their collateral fitness in today's complex regulatory environment and provide some direction as they wind their way through the regulatory maze. **AST**

To help navigate the regulatory maze, many market players are increasingly embracing a 'forensic' approach to analyse the full cost of each transaction

This article is based on Collateral Management: Navigating the Regulatory Maze, the second in the collateral management and regulation series co-written by The Field Effect and BNY Mellon. To read the full paper, visit www.bnymellon.com. The views expressed within this article are those of the author only and not necessarily those of BNY Mellon or any of its subsidiaries or affiliates, which make no representation as to the accuracy, completeness, timeliness, or fitness for a specific purpose of the information provided in this document. Material contained in this article is intended for information purposes only and not to provide professional counsel or investment advice on any matter. No statement or expression is an offer or solicitation to buy or sell any products or services mentioned.



Embracing alternatives

Investment options in Ireland mean the Emerald Isle remains a haven for alternative funds, says Shane Geraghty of Dillon Eustace

A recent report by PwC proposed that, between 2015 and 2020, alternative assets may to grow to between $13.6 trillion and $15.3 trillion. By 2020, investment private equity and real estate investment are expected to grow to $6.5 trillion and $2.5 trillion, respectively. This growth and the ensuing investor demand is expected to be matched by a corresponding growth in the launch of pooled fund products to house alternative investment strategies.

The Irish qualifying investor alternative investment fund (QIAIF) is an attractive structure for meeting such requirements.

Ireland's funds industry

Ireland has a mature and vibrant investment funds industry and is a leading alternative investment fund domicile in Europe with over 6,300 Ireland-domiciled investment funds, of which almost 2,000 are QIAIFs with a significant majority of the balance being UCITS funds.

All of these funds are authorised and regulated by the Central Bank of Ireland and can benefit from the pan-European marketing passports of the Alternative Investment Fund Managers Directive (AIFMD) and UCITS. In addition, the central bank has a fast-track 24-hour approval process for QIAIFs.

Irish funds have been established to invest in a range of alternative assets or pursue alternative investment fund strategies.

These include QIAIFs for less liquid and illiquid alternatives such as hedge funds and funds of hedge funds, as well as private equity, venture capital, development capital, real estate, credit, distressed debt and private debt funds.

In addition, Ireland is a leader in the area of alternative UCITS. Investors in alternative UCITS funds can gain access to a variety of alternative strategies via a highly regulated product that is subject to significant portfolio regulation and liquidity requirements. UCITS funds still dominate the funds marketplace in Europe and net assets stood at approximately €7.9 trillion at the end of March 2016. Irish UCITS funds managed approximately €1.4 trillion in net assets as of June 2016.

Ireland's strong reputation in the UCITS and alternative investment fund space means it is well placed to capitalise on this projected growth in alternative asset classes.

ICAV as the preferred legal structure

The Irish collective asset management vehicle (ICAV) has become the preferred corporate fund structure in Ireland since its introduction and it offers distinct advantages, particularly from an operational and management perspective, over the public limited company (PLC) while at the same time preserving many of the PLC's key features, including having separate legal personality.

ICAVs can be a standalone or umbrella structure with multiple sub-funds, and provide significant operational and administrative benefits

These include:

- There is no requirement to comply with Irish company law;
- An ICAV can, in certain circumstances, amend its constitutional documents without shareholder approval;
- AGMs can be dispensed with;
- Financial statements can be prepared on a sub-fund by sub-fund basis; and
- They 'check the box' to be treated as tax transparent for US tax purposes, subject to certain requirements.

The ICAV is now well established as the most used corporate legal structure for Irish investment funds.

very limited number of investment restrictions and, unlike the Luxembourg specialised investment fund (SIF), for example, no diversification requirements.

QIAIFs can generally only be marketed to professional or other sophisticated investors and are subject to a minimum initial subscription requirement of €100,000 per investor, except in certain circumstances.

The flexibility of the QIAIF combined with the range of available legal structures means that Ireland continues to be a centre of excellence for all manner of alternative investment funds and offers a variety of customisable solutions for fund managers.

Future developments and outlook

Ireland should see continued growth in the area of investment into alternative assets and strategies via the QIAIF and alternative UCITS structures.

In addition, further refinement of the law and tax treatment relating to investment limited partnerships in Ireland will assist in attracting more alternative asset managers.

The ICAV is now well established as the most used corporate legal structure for Irish investment funds

Shane Geraghty
Senior associate for financial services
Dillon Eustace

QIAIF requirements

QIAIF structures are highly customisable and very flexible in terms of the types of investments they can invest in and the extent to which such investments can be concentrated. In contrast to UCITS funds, they are subject to a

It will also attract, in particular, those managers pursuing private equity investments where the use of limited partnerships is common.

The importance of investment funds to Ireland will ensure it will continue to be Europe's pre-eminent jurisdiction for alternative funds. **AST**

BNY Mellon

BNY Mellon is a global investments company dedicated to helping its clients manage and service their financial assets throughout the investment lifecycle. Whether providing financial services for institutions, corporations or individual investors, BNY Mellon delivers informed investment management and investment services in 35 countries and more than 100 markets.

As of 31 December 2015, BNY Mellon had $28.9 trillion in assets under custody and/or administration, and $1.6 trillion in assets under management. BNY Mellon can act as a single point of contact for clients looking to create, trade, hold, manage, service, distribute or restructure investments.

BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation. Additional information is available at www.bnymellon.com. Follow us on Twitter @BNYMellon or visit our newsroom at www.bnymellon.com/newsroom for the latest company news.

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Commerzbank

Commerzbank is a leading international commercial bank with branches and offices in more than 50 countries. With the two business segments—private and small business customers, and corporate clients—the bank offers a comprehensive portfolio of financial services which is precisely aligned to the clients' needs. Commerzbank finances more than 30 percent of Germany's foreign trade and is the unchallenged leader in financing for small and medium-sized enterprises.

The Commerzbank subsidiaries Comdirect in Germany and M Bank in Poland are two of the world's most innovative online banks. With approximately 1,000 branches Commerzbank has one of the densest branch networks among German private banks. In total, Commerzbank boasts more than 16 million private customers, as well as 1 million business and corporate clients. The bank, which was founded in 1870, is represented at all the world's major stock exchanges. In 2015, it generated gross revenues of almost €9.8 billion, and it has approximately 51,300 employees.

www.commerzbank.com

Dillon Eustace

The Dillon Eustace Investment Funds legal team of 16 partners plus 22 solicitors (supported by dedicated tax, regulatory compliance, listing and company secretarial units) acts for more than 1,000 Irish and Cayman Islands funds across all product types—from UCITS to the full spectrum of alternative products. The team advises on product design, authorisation and launch, on prospectus and contractual documentation negotiation, interaction with regulators and exchanges, funds listing and tax issues.

Dillon Eustace, which has over 25 years' experience, represents the largest number of Ireland-domiciled funds, as well as funds domiciled in the Cayman Islands, British Virgin Islands, Jersey and other international fund centres.

The team is recognised internationally as one of the most innovative and dynamic groups of lawyers in this practice area in Chambers, IFLR and the Legal 500.

www.dilloneustace.com

Donnelley Financial Solutions

Donnelley Financial Solutions helps organisations communicate more effectively by working to create, manage, produce, distribute and process content on behalf of customers. The company has developed a range of solutions to help finance industry professionals save time and money, reduce effort and streamline operations by automating processes. Taking advantage of modern, innovative technologies, allows you to focus on what adds value, whether it is drafting, due diligence, regulatory filing or shareholder and customer communications.

As one of the first companies to specifically address the compliance communication needs of the asset management industry, Donnelley Financial Solutions employs a comprehensive team specifically focused on the regulatory requirements affecting the European financial markets. Our range of capabilities and superior technology, combined with process improvements, optimisation solutions and production expertise, help clients stay in compliance with changing regulations, reduce total costs and optimise the preparation, production and delivery of their documents. Our composition, production, translation, delivery and results tracking offer a complete communications solution, addressing your needs today as well as in the future.

www.donnelleyfinancial.com/emea

KDPW Group

KDPW Group, including the CSD and CCP clearinghouse, is the most important infrastructure institution on the Polish capital market. The group offers a competitive, integrated and complementary package of depository, clearing, settlement and added-value services. Thanks to synergies between KDPW and KDPW_CCP, KDPW Group provides its clients with the highest international standard services.

KDPW—the central securities depository of Poland—is responsible for the settlement of transactions concluded on the regulated market and in alternative trading systems and for the operation of the CSD. In addition, KDPW provides many services to issuers including dividend payments to shareholders, assimilation, exchange, conversion and split of shares, and execution of subscription rights.

KDPW also offers trade repository services under European Market Infrastructure Regulation requirements. KDPW_TR covers the reporting of all types of contracts subject to the reporting obligations (including exchange-traded and over-the-counter derivatives). KDPW_CCP is a clearinghouse responsible for the clearing of transactions on the regulated market and in the alternative trading system and the operation of a clearing guarantee system. KDPW_CCP began its operations on 1 July 2011.

www.kdpw.pl

KNEIP

KNEIP is the independent technology-based expert and service leader in data and reporting for financial products. We bring our clients, fund producers, a competitive advantage by introducing them to an integrated way of managing their data and reporting requirements throughout the lifecycle of their funds. Technology is the core of our capabilities, bringing automation, consistency and scalability to our services. Since its beginning, KNEIP has played an important role in regulatory technology, moving the industry forward using technology to make financial data management and reporting more efficient and trustworthy.

Our teams are among the most knowledgeable in the industry, specialising in regulation, data management, and fund distribution in the most complex market in the world: Europe. With headquarters in Luxembourg and offices in Belgium, France, Germany, Switzerland and the UK, we serve more than 420 of the world's leading fund management companies. Over the past two decades, we have built relationships with regulators, digital platforms, data vendors and distributors worldwide. We are the largest supplier of fund performance data to Bloomberg, and with over a tenth of the total European fund reporting market, we are unique in the marketplace. KNEIP is the only company with the size, track record, and capability to offer the breadth of data and reporting solutions that we do today. The competitive advantage we bring our clients comes from consistent, reliable data and reporting to regulators and the market, which frees up their resources so they can focus on their core business.

www.kneip.com

Nasdaq

With over 20 years of proven experience in the world's most demanding markets, Nasdaq is the largest exchange technology provider, powering one in 10 of securities transactions globally. Our evolutionary and harmonised approach with the Nasdaq Financial Framework, delivers robust business functionality across the trade lifecycle, enabling organizations to flexibly trade, clear and settle any financial instrument on the planet from one integrated solution. No platform is faster or more scalable.

Nasdaq's commercial technology business provides technology and advisory services that shape the capital markets of 100 marketplaces, clearing organisations and central securities depositories in over 50 countries, and more than 120 market participants trust our risk and surveillance solutions to keep them safe and compliant. Our capabilities are unique and unmatched by any market infrastructure technology provider on the planet.

www.business.nasdaq.com/market-tech

Riva Financial Systems

Riva Financial Systems Limited has been a supplier of innovative administrative solutions to the asset management and fund servicing industry since 2002. It was incorporated by a group of industry professionals each with extensive experience of operations and technology at some of the largest asset managers and fund administrators in Europe. The founders recognised that there was a lack of modern investor record-keeping technical solutions available for an increasingly dynamic asset management market environment, where complex new investment products could no longer be adequately sustained by legacy platforms.

Their vision was to create the next generation of investor record keeping solutions built using best of class technology and servers, the flagship product that emerged from this blueprint was the Riva Transfer Agent solution (Riva TA), a highly functional global transfer agency software system able to support the entire investor record keeping process across multiple administration centres, investment products and currencies all on a single platform.

Riva is headquartered in the Isle of Man with a branch in Luxembourg, and its first client implemented Riva TA in 2005. Currently, Riva has employees based in the Isle of Man, Luxembourg, the UK, Canada and India, and continues to flourish.

www.rivafs.com