Technological innovation challenges industry and regulators

Evolving Investment Management Regulation

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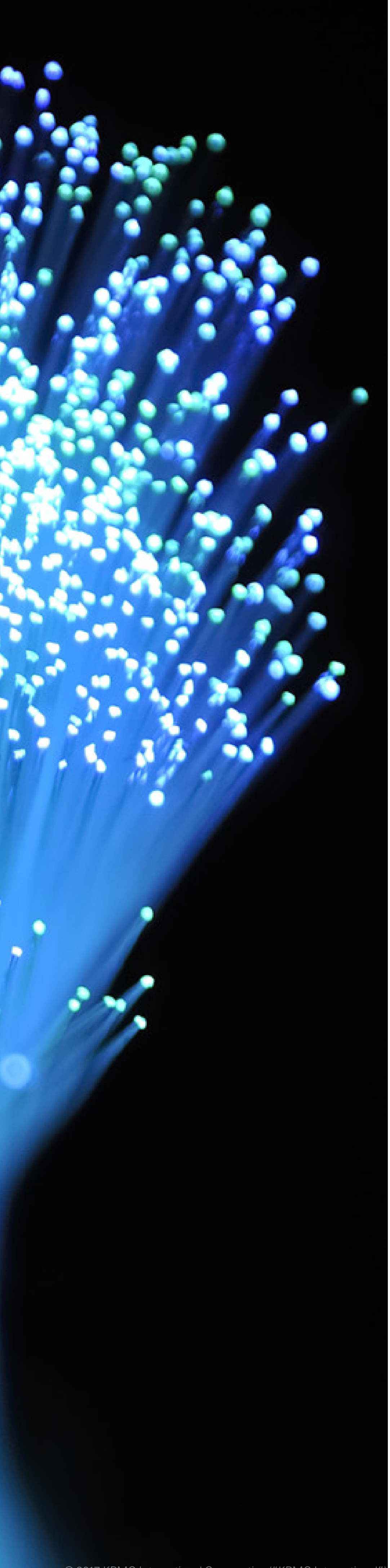
Innovation and automation are starting to disrupt and reshape the investment management industry, threatening traditional fund firms, according to The World FinTech Report.[1]

In the area of robo-advice, the report says some 17 percent of respondents worldwide exclusively use FinTech companies to invest their savings. Another 27 percent of respondents use a FinTech service alongside a traditional funds firm.

New technologies are also impacting firms' back offices, such as the rise of distributed ledger technology (DLT). Technology can have positive impacts: it can bring efficiencies in transactions in fund units, for example, and help firms and regulators meet the increasing demands for data, including fiscal authorities' demands for information on fund investors.

However, innovation is causing regulators to question whether existing rules and supervisory approaches are fit for purpose. Prior concerns about cyber-security, money laundering and terrorist financing are amplified by recent attacks.

[1] https://www.capgemini.com/the-world-fintech-report-2017



Regulators cheerlead the FinTech revolution

Many investors want a better and more convenient way to engage with fund managers. It is inevitable that customers would expect a level of service on a par with Amazon, the gold standard for retail technology. This expectation provides a significant challenge for financial firms burdened by legacy systems.

Regulators are recognizing the challenges. In its CMU report of mid-2016, the **European** Commission said it would "continue to promote the development of the FinTech sector and ensure that the regulatory environment strikes an appropriate balance between promoting FinTech and ensuring confidence for companies and investors". The Commission has also made provisions for the use of FinTech in existing legislation, including MiFID II, the Payment Services Directive and EMIR.

In March 2017, it issued a consultation paper on the development of its policy approach towards technological innovation in financial services. It is seeking "a genuine technology-enabled single market for retail financial services".

National regulators are recognizing the opportunities and are, in the main, happy to facilitate the roll-out of FinTech in their jurisdictions.

In **France**, the AMF launched a joint FinTech forum in July 2016 and set up a new FinTech, Innovation and Competitiveness division. Its objectives are: to accompany the development of new companies during their pre-authorization phase; to identify new models, techniques and financial technologies with the ability to disrupt current client behaviors and market practices, and to assess related risks; and to increase Paris's competitiveness as a financial center.

In **Japan**, the JFSA has committed to creating a favorable ecosystem for the growth of FinTech start-ups, to support the legal framework for FinTech and to help investment managers that implement new technology. It is establishing a panel of experts to discuss possible measures and has exchanged letters with the **UK**'s FCA on a co-operative framework to assist companies seeking to enter the other market, with the intention of reducing regulatory uncertainty and time to market. The UK has also signed co-operation agreements with Hong Kong, allowing information sharing.

In **Singapore**, MAS has taken strides towards building a Smart Financial Centre. In collaboration with a number of Singaporean government agencies, it has set up a FinTech office to serve as a single point of contact for all FinTech-related issues and to promote Singapore as a FinTech hub.

In November 2016, MAS published its "regulatory sandbox" guidelines to encourage and enable experimentation of solutions that utilize technology innovatively to deliver financial products or services. It allows innovative solutions to be experimented with, even if the solution or the developer of the solution does not fully meet MAS's regulatory requirements.

Also in November 2016, the **Luxembourg** government and its private sector partners, including financial services firms and auditors, founded the Luxembourg House of Financial Technology to support FinTech start-ups. They are supporting the project together with the City of Luxembourg, the University of Luxembourg and the local chamber of commerce.

In **Switzerland**, the government said in a federal council report, entitled "Financial Market Policy for a Competitive Swiss Financial Centre", that it would foster innovation in financial services by removing "disproportionate barriers to market entry" for FinTech firms. At present, the focus is on amendments to banking law.

Investment managers have no time to lose on innovation

Next 3 years will be critical

74%

Almost three-quarters of investment management CEOs said that the next 3 years will be more critical than the previous 50 for their organization amid disruptive technologies emerging.

In **Thailand**, one of the regulator's four strategy themes for 2017–19 is to embrace FinTech as a tool for adding value and creating more efficient market and accessibility for all stakeholders. Additionally, the regulator will use RegTech for better regulatory supervision and place high importance on cyber resilience.

FinTech is not getting a completely free ride

FinTech is new and its influence is set to grow, so it is only natural that some caution is being expressed by regulators.

Brussels has employed a new internal taskforce to investigate **Europe**'s FinTech industry amid concerns customers and consumers are not adequately protected. The taskforce, which was launched by the European Commission in November 2016, brings together Commission expertise on financial and digital services, and cyber security and consumer protection. It is examining all areas of FinTech, including DLT, robo-advice and regulatory technology, such as compliance monitoring software.

Mark Carney entered the fray in his capacity as FSB Chair to ask if FinTech might lead to risks to financial stability and what macro-regulatory responses might be required. In a speech in January 2017, he warned that some innovations could generate systemic risks through increased interconnectedness and complexity, greater herding and liquidity risks, more intense operational risk and opportunities for regulatory arbitrage. This may require a more intense focus on the regulatory perimeter, revised prudential requirements, more broad-ranging resolution regimes, and a more disciplined management of operational and cyber risks. The FSB is currently investigating the risks of FinTech and will present its findings at the G20 meeting in July.

Robo-advice: widely seen as a force for good

Automated advice is entering the mainstream in both developed and developing markets. On many robo-advice platforms, customers can visit a website to answer questions about their personal and financial circumstances, then software suggests a relevant investment strategy. Fees are considerably lower than for traditional financial advisors, and robo-advice is seen as a middle way between self-service investment and face-to-face investment advice.

Robo-advice has grown to be a key component of the FinTech revolution, impacting asset allocation, portfolio selection and trade execution, and many regulators see it as a force for good.

In **Hong Kong**, internet distribution platforms and robo-advice have been welcomed by the regulator as a way to break the stranglehold of banks over fund distribution. The regulator has been looking at ways of encouraging other channels of fund distribution for a number of years, including via the stock exchange.

In **Australia**, ASIC released its guidance on regulating digital advice in August 2016. The regulator said it "supports the development of a healthy and robust digital advice market in Australia as a convenient, low-cost option for retail clients, and our guidance will help ensure that consumers can have confidence when they deal with digital advice providers."

ASIC noted that only around 20 percent of Australians seek personal investment advice, so digital options could increase access to advice. Providers should take a user-focused approach and put the client's needs first when designing communications and disclosure, ASIC said.

Europe has a generally positive stance. At the European Parliament's Committee on Economic and Monetary Affairs in November 2016, Jakub Michalik, of ESMA's legal division, said robo-advisors can "positively influence" the industry. The development of robo-advice dovetailed, he noted, with a move by regulators for a fairer and more transparent service to investors. Although robo-advice represents less than 1 percent of assets under management in Europe, ESMA expected this to rise to 25 percent by 2020.

In July 2016, the **UK** regulator created a dedicated robo-advisor unit to encourage new entrants. The FCA launched the unit after an "advice gap" emerged in the wake of the UK's Retail Distribution Review, the effects of which are still moving through the system. The regulator noted that automated advice models must meet the same standards as face-to-face advice.

> "... many may not understand the risks and investment features of products."

But automated advice tools not yet fully trusted

Robo-advice typically targets the low-end retail market, creating the risk that unsophisticated investors could receive poor financial advice or products that don't match their needs.

IOSCO in its report at the end of 2016 said the key regulatory concern is that consumers should receive appropriate advice, the same as for the face-to-face advice model. The use of technology raises the added concern that, if there is an error in programming or in the technological process, it may not be picked up without human intervention. Consumers will presume that their inputs and the software must be right, often without sense-checking.

IOSCO adds that many robo-advisors do not capture enough information about their clients, resulting in "simplistic" processes that are not suited to the client's needs. It says the questionnaires by which the platforms learn about customers are often "very short" and may not meet KYC requirements.

Most national regulators believe their existing rules are adequate. A number, though, are seeking to clarify the difference between general information, generic advice and personal recommendations, and are requiring regulated firms to disclose the type of service they are offering and its limitations. Some regulators acknowledge that their supervisory techniques must evolve too.

IOSCO noted that the majority of national regulators (Canada being a notable exception) have only limited information regarding the number of firms providing robo-advice and the number of customers and assets involved, because in many jurisdictions it is not a regulated activity. However, regulators have some knowledge via regulated firms that offer such tools, while other regulators (e.g. in **Australia**) have launched exercises via their FinTech units that will capture more information.

In **Canada**, the OSC noted a significant increase in the number of firms seeking registration to operate online portals and trading platforms, and a number of registration deficiencies. The regulator underlined that regulatory requirements are "technology neutral".

OSC staff have also identified concerns with issues related to vulnerable investors – such as seniors – given their growing demographic importance, the fact that they are relying on investments to fund retirement costs, and that many may not understand the risks and investment features of products.

In **Europe**, the ESAs have published their final paper on automated advice platforms. The bodies previously published a Discussion Paper on automation in financial advice in December 2015, which said "regulatory and/or supervisory actions may be needed to mitigate the risks while at the same time harnessing the potential benefits". The term "advice" is not used with the narrow meaning in European regulation, but also encompasses "guided sales" and analytical tools.

Respondents to the Discussion Paper challenged suggestions that automated tools could provide wider access to advice, facilitate cross-border transactions or meet more complex client needs. They said divergent regulatory definitions of "advice" in the banking, securities and insurance sectors are a barrier to the development of automated advice.

The ESAs do not propose to develop additional cross-sectoral requirements for automated advice tools at this time. However, firms that offer such tools should use the ESAs' checklist of risks for their design, implementation, monitoring and governance processes.

In the **US**, the growth of robo-advisor platforms has led to increased attention by regulators. They want to be sure that wealth management firms using these platforms are adhering to compliance requirements, such as proper distribution of account opening documentation and accurate disclosures of historical performance.

Many firms using traditional advisors and brokers have developed strong controls over account opening processes. But broker-dealers and other wealth management firms using robo-advisor platforms or client-directed portfolio construction tools need to ensure that their policies and procedures – and the actual delivery of products and services – are equally controlled.

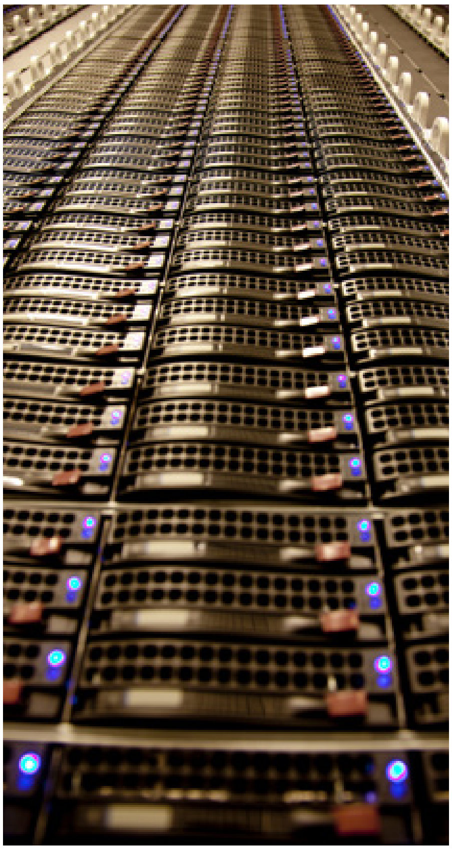
Despite its welcoming words for robo-advice in 2016, the **UK**'s FCA later in the year took a more challenging stance, saying it is examining whether action is required to monitor robo-advisors. Bank of England Governor Mark Carney warned that robo-algorithms could increase financial volatility.

Distributed Ledger Technology, the game changer

DLT has huge potential implications in the investment management industry for settlement, and for back and middle offices. As yet, the technology is largely untested, and this worries regulators, particularly given media stories about theft and criminal misuse of bitcoins. The case for DLT was not helped in March 2017 when the **US** SEC rejected an application for a bitcoin ETF, because "significant markets for bitcoin are unregulated".

Nevertheless, proponents are enthusiastic about the ability of DLT to improve the fund management industry. DLT allows a digital asset to be moved between counterparties without using a central ledger to record the transaction. The technology aims to prevent fraud by using a public digital database that is continuously maintained and verified by the other computers in a chain of transactions.

In the investment management industry, it has the potential to speed up inefficient back offices processes and save billions in the amount of collateral that is required by the global financial system. DLT-based platforms can connect investors with fund firms and transfer agents. The transparent and immutable nature of this technology means it could be used to register subscriptions and redemptions of fund units, which could give fund houses greater visibility over who is invested in their products.



Regulators clamp down on social media

Social media is increasingly part of the marketing and distribution mix in the funds world, and has moved onto regulators' agendas. The **UK**'s FCA, for instance, announced in October 2016 that firms must obey distribution rules, even on social media, in a move that may limit the attractiveness of Twitter for fund marketers.

Respondents to a consultation had asked the FCA to take into account the "whole customer journey" rather than each communication. But the regulator decided to stand firm on earlier guidance that interaction with consumers on social media must be "standalone compliant". It will not allow a promotion to include a click-through link showing extensive terms and conditions.

This media-neutral approach to financial promotions echoes that taken by other regulators. IOSCO said that because regulators' rules are largely principles-based and technology neutral, they should also apply to social media.

France's AMF said in May 2016 that rules governing traditional media apply equally to social media and that a specific regulatory framework would not be desirable. In **India**, social media are widely used by fund managers.

US's FINRA is also updating its social media guidance. In **Singapore**, meanwhile, MAS says it does not explicitly prohibit any forms of media from being used for marketing.

> "... creates additional points of entry for malicious actors to compromise the confidentiality, integrity and availability of the ledger".

New DLT-based platforms could respond to new regulation by automatically presenting information to the regulator as a transaction occurs. Regulatory changes like MiFID II and the second iteration of the Payment Services Directive will represent sizeable change for the investment management industry and challenge the current system by which managers incentivize distributors to sell their funds.

While other financial industries have found DLT to have "performance problems" due to its inability to handle a large amount of transactions at the same time, this is less likely to be an issue in the fund industry. And a number of tests have shown that mutual fund transactions can be made successfully using the technology, which is particularly suited to the mobile market.

DLT could disintermediate many industry participants and eliminate many back- and middle-office jobs. Industry incumbents are well-aware of this and are acting to ensure their businesses survive any shake-up by the technology. The majority of consortia involved in the planned roll-outs have been set up by custodians and service providers. Several versions are expected to be rolled out from 2017 onwards.

DLT comes to funds

A DLT-based platform, enabling managers to sell funds directly to investors or on a business-to-business basis, has been rolled out in **Luxembourg**.

The platform is based on Ethereum, the world's second largest DLT technology, and has been created in partnership between KPMG Luxembourg, Fundsquare and InTech. Fund managers are testing the platform and it is expected that the first live transactions will take place in the middle of 2017.

Regulatory preparation is key to DLT roll-out

Investors are willing to embrace new technology, but regulators may be less prepared for its introduction. Integrating DLT with existing regulatory and legal frameworks is seen as the biggest challenge preventing its widespread adoption.

However, regulators are starting to address the issue. DLT has a long way to go before it can be fully realized, according to the ECB. Its committee on payments and market infrastructures said DLT could pose new risks to the financial system, including potential uncertainty about operational and security issues. Its report also cited potential legal and operational obstacles: "Having many nodes in an arrangement creates additional points of entry for malicious actors to compromise the confidentiality, integrity and availability of the ledger".

ESMA has also consulted on the application of DLT, aiming to identify its benefits, risks and challenges in securities markets and ways of addressing the risks. ESMA identified possible benefits in clearing and settlement, record of ownership and safekeeping of assets (including fund units), reporting and oversight, reduction of counterparty risk, efficient collateral management, continuous availability, security and resilience, and cost reduction. DLT might also be used to enhance pre-trade information and the matching of buyers and sellers.

There are challenges and possible shortcomings in its use, though, ESMA believes. Technologically, these include scalability issues, interoperability with existing market infrastructure, the need to settle in central bank money, a recourse mechanism, gross positions (as opposed to netting), margin finance (which currently allows participants to transact with assets financed externally) and short selling of securities. Also, there are governance, privacy, regulatory and legal issues. In particular, the capacity of DLT to fit into the existing regulatory framework may limit its deployment (ESMA mentions over 10 different pieces of EU legislation it must fit within). The legality and enforceability of records needs careful consideration, too.

Key risks identified by ESMA are cyber, fraud, money laundering, operational, herding behavior (increased market volatility) and unfair competition.

ESMA suggests early applications will focus on optimizing processes using the current market structure, with likely first uses being in low-volume market segments and processes with minimal dependency on the existing legal framework. It said it would continue to monitor developments but believes that active engagement from regulators and co-ordination at EU and international level is paramount to ensure that applications of DLT do not create unintended consequences.

In February 2017, ESMA issued a follow-up report, which largely confirmed its information and thoughts in the consultation. Significantly, it believes the current EU regulatory framework is not an obstacle to DLT in the short term. However, a number of concepts or principles may require clarification.

In November 2016, the European Commission swung into action, launching a financial technology taskforce to look at all areas of financial technology, including DLT. It confirmed in February 2017 that it would support activities that advance DLT. It is planning to develop experimental frameworks enabling innovation, as a part of the "Start-up and Scale-Up Initiative", which aims to give entrepreneurs in DLT and FinTech every opportunity to become world-leading companies.

Also in November 2016, **France** started working on legislation that would allow funds to be distributed using DLT. It is the first European country to develop a legal framework governing its use for investment management. The French government is exploring extending rules passed earlier in 2016 permitting non-listed securities to be registered on a distributed ledger. The French treasury believes DLT will make it easier to sell funds across borders.

The **UK**, on the other hand, has adopted a different approach, setting up a regulatory "sandbox" and selecting a range of DLT-based services to take part in the project. The regulatory sandbox, or safe space, provides potentially ground-breaking technology with the support to test new ideas without imposing all the normal regulatory requirements. **Australia**'s regulatory sandbox framework also allows FinTech to be tested without a license.

The **Netherlands** set up a regulatory sandbox in December 2016. As of the beginning of 2017, Dutch companies could also take advantage of partial authorization, authorization with requirements or restrictions, or an opt-in authorization.

In **Ireland**, the trade body for the funds industry has partnered with private firms to create a test environment distributed ledger for fund regulatory reporting. Irish Funds said in January 2017 it would test the application of DLT for improvements in compliance and transparency, as well as assessing any cost benefits of implementing the technology.

2 Markets in Financial Instruments Regulation
3 Australian Prudential Regulatory Authority

In **Singapore**, in conjunction with R3, a DLT technology company, and a consortium of financial institutions, MAS is working on a proof-of-concept project to conduct inter-bank payments using the technology.

Technology plays part in regulatory focus on data

In **Europe**, ESMA's Supervisory Convergence Programme for 2017 includes data as one of its four main priorities.

It believes data quality will be essential as NCAs prepare for and enforce compliance with the various reporting requirements under MiFID II/MiFIR[2], EMIR and AIFMD. It notes, for example, that poor quality of data in MiFIR transaction reports passed from one NCA to another will have a consequential impact on the receiving NCA's analysis. ESMA emphasizes focus on the development of supporting IT infrastructure.

In **Australia**, the prudential regulator (APRA[3]) has written to pension fund trustees asking them to focus on data quality. The volume of claims of misconduct, mis-selling and poor advice indicate an issue, but too often, APRA said, firms cannot disprove claims against them as they do not have the data to evidence the contrary.

APRA has observed increased appetite by the superannuation industry to implement new business practices for administration, communication and account consolidation that are driven by new technologies. APRA encourages innovative approaches to engagement with members, but says schemes must identify, assess and manage the associated risks. This includes a prudent assessment of the materiality of outsourcing, with a particular focus on ensuring the security of member data.

APRA is concerned that schemes are providing bulk extracts of sensitive member data, including individual tax file numbers, to third-party service providers for business intelligence, customer analytics and marketing.

Concerns of investment management CEOs

Ability to innovate as digital is changing the industry

85% are concerned about integrating basic automated business processes with artificial intelligence and cognitive processes

81% are not sure they are keeping up with technology

81% say that managing data is increasingly important, and 81 percent of CEOs are concerned about the quality of data used in their decision-making

In **Europe**, the GDPR comes into force in spring 2018 and includes a number of new protections for EU data subjects' personal information. In particular, it imposes broader extra-territorial controls on the processing of personal data by non-EU controllers that collect personal data through the provision of services to EU citizens. This is one of the many "third-country" provisions in EU regulation that will need to be navigated by European firms post-Brexit.

Switzerland's regulator issued a circular that includes detailed conditions that must be met by intermediaries by June 2017 when they transmit non-public information to foreign entities. The Swiss Data Protection Act is also being revised.

Strong regulatory response to cybersecurity challenge

The **Irish** central bank has indicated it takes data requirements, and the increased risks around data, very seriously. Recent activity has been comprehensive. In September 2016, it issued cross-sectoral guidance on IT risk management and cybersecurity for financial services firms.

Boards and management of regulated firms are expected to take full responsibility for these issues and to make them a priority. Key issues firms need to address include the alignment of IT and business strategy, outsourcing risk, change management, cybersecurity, incident response, disaster recovery and business continuity.

The CBI is increasingly adopting a data-driven approach to supervision. It established a team of data analysts within its Securities and Markets Supervision Directorate to support frontline supervisors.

In particular, it has indicated it will increase its supervisory activities for low-impact entities. As a large proportion of fund managers and all investment funds are currently categorized as low impact, it is expected that they will be subject to more extensive engagement, with a focus on the quality of the data submitted in regulatory returns.

In the **UK**, the FCA sent out a Technology & Cyber Resilience Questionnaire in March 2017. It said it would use the information gained for insight into how firms are managing their technology resilience obligations and to determine appropriate supervisory approaches.

In the **US** alternatives industry, investment advisors face cyber risks from both internal and external sources, including employees, third parties, and others outside their organizations.

Cyber attacks on private equity firms and other companies had become so routine that some boards are reluctant to fund their chief information officers' request for additional resources, believing extra resources won't deter attacks and penalties cannot be averted.

The authorities are alarmed by the number and extent of attacks. New York Governor Andrew Cuomo announced the first-in-the-nation cybersecurity regulation. It took effect in March 2017 and requires firms to establish and maintain a cybersecurity program designed to protect consumers' private data and ensure the safety and soundness of New York's financial services industry.

In **Japan**, the JFSA was planning to conduct its first industry-wide exercise in 2017 to upgrade firms' capabilities against cyber-attacks.

The events of May 2017, which impacted key institutions in over 150 countries, have elevated cyber security as a priority issue.

Renewed focus on AML data

With the growth of technology and increased access to data, regulators are concerned that data could be leveraged for money laundering purposes. Therefore, the regulatory threshold for AML is rising.

In **Singapore**, increased focus on AML and combating the financing of terrorism (CFT) was the main theme of 2016. In August 2016, MAS set up two dedicated departments — a supervisory department and an enforcement department.

The supervisory department streamlines existing responsibilities for regulatory policies relating to money laundering and other illicit financing risks. It monitors money laundering risks and carries out onsite supervision.

The enforcement department centralized MAS's enforcement functions and jointly investigates capital markets misconduct offences with the Singapore Police Force's Commercial Affairs Department.

In **Europe**, the ESAs published in March 2017 an opinion on the risks of money laundering and terrorist financing. This opinion will contribute to the European Commission's risk assessment work as well as to the ESAs' work to foster supervisory convergence and create a level playing field in AML and CFT.

The opinion finds that problems exist in firms' understanding and management of the risks they are exposed to. It also said there is a lack of timely access to intelligence that might help firms identify and prevent terrorist financing, and considerable differences in the way national authorities deal with it.

These issues, if not addressed, risk diminishing the robustness of the EU's AML/CFT defenses. This is particularly important as Member States move towards a risk-based AML/CFT regime that requires a level of awareness and expertise that not all firms currently have. Several initiatives are already underway, including the ESAs' work on common risk-based AML/CFT supervision that, in the short to medium term, will address many of the risks identified.

"... the regulatory threshold for AML is rising."

How KPMG can help:

- cyber incident response services to support attack victims
- advice on technical aspects to help protect firms against attack
- advice on cyber incident response framework and processes
- exersises to test a firm's capabilities to detect, respond to and recover from cyber attack.

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