Regulatory Developments in the Securities Services Chain

Progress Made in Various Regulatory Initiatives Undertaken in the Aftermath of the Financial Crisis

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Abstract

In 2012, ISSA published a Report on "Regulatory Trends and Initiatives Affecting Custodians, Clearers and (I)CSDs; Impacts and Implications". This Report was written in the relatively recent context of the 2008 financial crisis.

This new Report is in direct continuity of the Report issued in 2012. It aims to provide an overview of main progress made in the various regulatory initiatives undertaken and of the new regulatory trends underway for the securities industry over the last 5 years.

A second report (to be published in the 1st half 2018) will focus on appraising how the securities services industry has adapted to these various evolutions, notably by modifying internal organization and operational processing, but also by introducing new types of client services.

Target Audience

This paper is addressed to market intermediaries, such as custodian banks, clearers, brokers as well as to asset managers, issuers, industry associations / groups, market infrastructures and regulators.

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Disclaimer

It is ISSA’s intention that this report should be updated periodically. This document does not represent professional or legal advice and will be subject to changes in regulation, interpretation, or practice.

None of the products, services, practices or standards referenced or set out in this report are intended to be prescriptive for market participants. Therefore they should not be viewed as express or implied required market practice. Instead they are meant to be informative reference points which may help market participants manage the challenges in today's securities services environment.

Neither ISSA nor the members of ISSA's Working Group listed in chapter 5 of this report warrant the accuracy or completeness of the information or analysis contained in this report.

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Executive Summary of the Previous Report

The International Securities Services Association (ISSA) 2012 Regulatory Report (the 2012 Report) was written in the relatively recent context of the 2008 financial crisis. The crisis is still well remembered nowadays of course, but the immediate memory of 2008’s dramatic event has perhaps been diluted through the relentless occurrence of new challenges. The regulatory resolve never to allow the events of 2008 to be repeated is undiminished, but regulators are now looking at a broader range of topics than back then. The Report below reflects this new broader scope.

The main strands of the 2012 Report arose from the G-20 requirements to trade standardised derivatives on exchange, to report the trades and to clear them centrally. A further strand arose from the strict liability placed upon depositaries to make immediate restitution of lost assets. The legislation and market developments discussed in the Report were mainly Basel III, EMIR, MiFID II, Dodd-Frank Act, AIFMD, UCITS V, T2S, and the effect of a low interest rate monetary policy. CSDR, SFTR, most Level 2 provisions, and the practicalities of mass implementation were all in the future.

In line with the strands above, the 2012 Report set out 5 key regulatory objectives that had emerged:

- Reduce risk in general and systemic risk in particular;
- Increase transparency for the benefit of regulators, investors and financial markets generally;
- Increase standardisation in order to reduce operational risk and promote productive uniformity;
- Reduce costs and increase efficiency at various industry service levels;
- Promote level playing fields among competitors. As a related theme, the 2012 Report noted that during the recent crises, the equities and bond markets continued to function well, with no failure of market infrastructures or significant custodians.

The 2012 Report also set out 4 consequent tasks:

- Identify sources of systemic risks;
- Regulate non-regulated products and actors;
- Coordinate actions undertaken between authorities in case of exceptional situations;
- Reinforce prudential measures to face extreme situations.

The Report noted the trend towards greater volumes being placed in infrastructures (trading venues, CCPs, CSDs and trade repositories), and the central role of banks and insurers as risk absorbers in times of crisis for the whole financial system. It has been widely acknowledged that the infrastructures do not have the money to absorb the costs of any future systemic failure, and that taxpayers do not have the inclination (or indeed the money perhaps).

Opportunities were listed in the 2012 Report as:

- Outsourcing of services;
- Collateral optimisation and transformation;
- Pan-European CSD access and competition;
- Access to infrastructures;
- Trade repository reporting on behalf of clients;
- Transparency services such as data analysis and retrieval on behalf of clients.

One probable outcome of the developments was given as the passing through of additional costs to end-users. The report’s findings have been borne out by the past 5 years’ experience, but new emphases, implications and consequences have begun to emerge.
Introduction: Scope and Objectives of the New Report

As noted in the previous section, in June 2012 ISSA issued a comprehensive Report reviewing the regulatory changes triggered since the 2008 financial crisis in the various geographic regions that affect the securities industry. It analysed the impact of new regulatory initiatives adopted on custodians and financial market infrastructures in terms of additional cost, changed risk responsibilities and the creation of new opportunities.

This Report is in direct continuity of the previous one. With this follow-up document ISSA aims to provide an overview of main progress made in the various regulatory initiatives undertaken in the aftermath of the financial crisis and of the new regulatory trends underway for the securities industry over the last 5 years. This review covers main developments at the international level and subsequently on the American continent (US and Latam), Europe and Asia. It also attempts to compare the similarities and differences across the regulatory initiatives in those separate regions. Finally the report will present a selection of new initiatives promoted by the public authorities more recently and which are seen as of interest in the post-trade landscape.

A second Report (to be published in the first half of 2018) will focus on appraising how the securities services industry has adapted to these various evolutions, notably by modifying internal organization and operational processing, but also by introducing new types of services for their clients. More recent and future developments will also be taken into consideration, especially when they may incur new orientations compared to those which prevailed following the financial crisis.

Today, the regulatory focus has embraced the objectives identified in 2012 and the new framework of rules has been designed to ensure the stability, safety and integrity of the financial markets. Regulatory focus is hence shifting its area of scope into:

- Enhanced systemic risk mitigation;
- Increased regulatory and market transparency;
- Addressing the resilience of financial institutions and financial market intermediaries (aimed at making taxpayer money intervention an image of the past);
- Increase the capital safeguards and collateral availability of financial institutions and financial market intermediaries;
- Further enhance investor protections through different means.

These rules attained a global reach, as driven into the G-20 and Financial Stability Board (FSB) agendas, which remain key drivers in all regions of the world leading to a progressive attempt to bring harmonisation of measures across the different regions. The current working agenda of the G-20 and the Financial Stability Board (FSB), along with foreseeable work from the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions (CPMI-IOSCO) as well as the Basel Committee on Banking Supervision (the "Basel Committee"), provide a proxy of the foreseeable areas of regulatory change for custodians and financial market infrastructures.

When looking at the G-20 and international institutions’ current work plans, it appears that priorities mentioned above are still relevant and will remain major drivers in the near future infrastructures. Initiatives launched in the aftermath of the financial crisis have been pursued in most cases and have been completed by new streams judged as building blocks in the path to resilience and stability of the financial system. The first such initiative concerns the Shadow Banking system, including a review of its different types of activities and players. The second is an extension of the scope of entities for which recovery and
resolution plans are seen as critical, with a strong focus on financial market infrastructures, notably CCPs.

In parallel, more specific regional initiatives have emerged and have resulted in additional sets of rules. Many of them have focused on investor protection and transparency aspects. Efforts to increase efficiency and reduce post-trade costs have also been deployed on a regional basis (as for instance the European “Target-2-Securities (T2S)” platform and reduction of settlement cycles). In both cases these regional developments have also substantially impacted the performance of securities services and the global framework applicable to the various categories of stakeholders.

In line with all these changes experienced by the securities services industry, this Report is structured around three main sections:

- **Section 1** describes main developments observed at the international level, by coming back on progress made for initiatives already addressed in the previous report and by presenting new reforms launched over the last years.
- **Section 2** examines how regional regulatory frameworks have evolved in that context by coming back on transposition of international standards, but also through review of more specific local and regional initiatives for each region.
- **Section 3** explores what ISSA considers should be the next trends in the regulatory space. It refers to the continuing actions to maintain financial stability and increase financial participants’ resilience. It also investigates the changes observed over the last months in the range of topics scrutinised by regulators at both the international and the regional level and finally geopolitical events which could also be strong drivers for the design of the new regulatory framework.

The Report concludes with the main challenges for regulators in the near future in view of current priorities. Regulators will continue to have to strike the right balance between their several priorities. These may prove to be contradictory in some circumstances, not least in the resilience and stability of the financial sector versus its economic growth and innovation.
1. **Regulatory Developments at the International Level**

In the seven years since the financial crisis, international bodies have produced standards and recommendations in the financial area at a sustained pace. For the purpose of this Report, we have reviewed progress achieved in the adoption of main regulatory initiatives launched in the aftermath of the financial crisis. As these developments in the securities services area were listed and detailed in the previous report, the focus here is on what has been achieved concretely from an adoption and implementation perspective and on what remains to be done.

The report also explores the new regulatory developments over the last few years. Since 2012 public authorities and regulators have extended their scope of review to new trends which have also impacts on securities services.

To facilitate the navigation through the report and provide an overview of main trends observed in the securities services area, this section starts with a summary of main sets of rules adopted by international bodies to address the G-20 requirements and which have impacted (or will impact) the performance of post-trade activities. It then refers to initiatives driven by other organizations (typically the OECD convention about tax evasion) and some sets of rules adopted in one jurisdiction but with strong extra-territorial reach (e.g. FATCA in the US).

1.1 **G-20 Agenda**

In the previous report, the following international initiatives were presented as the most impacting for the entire securities industry:

- FSB recommendations for reforms of the OTC derivative markets;
- FSB work on the Legal Entity Identifier (LEI) creation and use of unique identifiers (in reports to trade repositories);
- CPMI-IOSCO financial principles for financial market infrastructures (PFMIs);
- BCBS set of reform measures to strengthen the regulation, supervision and risk management of the banking sector (Basel III).

After review of the main progress achieved for each of these trends, this section will also focus on the new streams pushed by international bodies in this period which need to be taken into consideration by the securities industry. The main ones are:

- FSB recommendations to strengthen oversight and regulation of shadow banking;
- FSB key attributes for recovery and resolution plans to be adopted for financial market infrastructures;
- FSB on the creation and use of unique product identifiers (UPI) and unique transaction identifiers (UTI).
1.1.1 Progress Made on Initiatives Already Identified in the Previous Report

FSB recommendations for reforms of OTC derivative markets

Following the G-20 2009 Pittsburg Summit, the FSB was mandated to develop a set of reforms to improve transparency and mitigate systemic risks in OTC derivative markets. More concretely the following requirements were introduced for the OTC derivative contracts:

- Trade reporting with mandatory reporting of all these contracts to a trade repository;
- Mandatory central clearing for all standardized and liquid enough OTC derivative contracts;
- Capital and margin requirements for non-centrally cleared OTC derivatives;
- Mandatory platform trading for all OTC derivative contracts that can be cleared through a CCP.

Since the publication on 25 October 2010 of the 21 recommendations\(^1\) to guide authorities in the implementation of the G-20 commitments in this area, the FSB has issued on a regular basis progress reports to assess the effective implementation of these various requirements, with a jurisdiction-by-jurisdiction approach. The latest report was published in June 2017\(^2\).

As a summary, implementation of reporting to trade repositories is well advanced while progress remains to be done for other requirements, most notably for the mandatory execution of OTC derivatives on a trading platform and margin requirements for non-centrally cleared OTC derivatives.

Global minimum standards on margin requirements for non-centrally cleared OTC derivatives were jointly issued by the Basel Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions (IOSCO) in September 2013 and a revised version was issued in March 2015\(^3\). The final framework encourages wide-ranging changes such as the universal exchange of variation margin (VM) and initial margin (IM), restriction of eligible forms of collateral to highly liquid assets, segregation for initial margin and documentation requirements to govern collateral relationships. In addition, the standards encourage the adoption of sound risk mitigation techniques to foster effective management of counterparty credit risk and to facilitate timely resolution of disputes.

Since the release of the final margin policy framework, regulators in the United States, European Union, and Asian countries, have proposed rules consistent with the final policy framework, however, there are still many deviations amongst the rules set out by the jurisdictions. While many impacted financial institutions have mobilized internal and industry-wide programmes to address these regulations with significant investment in time and technology, it is obvious that not all market participants were adequately prepared for the economic and operational impacts of the new margin regulations, as proven when entry into force of variation margin requirements started on 1 March 2017.

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FSB work on the use of LEI and other unique identifiers

A direct consequence of the financial crisis has been the strong will from public authorities for additional transparency in the financial markets. Precise and accurate identification of legal entities engaged in financial transactions was seen as a critical need for both financial institutions and regulators, as it should enable regulators to improve systemic risk analysis by understanding aggregate risks for one specific entity and its counterparties, across asset classes and markets.

Following the request from the G-20 to introduce a global and standard Legal Entity Identifier (LEI) for each legal entity, the FSB published a first report in June 2012 on “A Global Legal Entity Identifier for Financial Markets” which sets out 15 global LEI system high level principles and 35 recommendations for the development of a unique identification system for parties to financial transactions.

This report, endorsed by the G-20, defines the scope of coverage of the LEI and also recommends a three-tier structure for the global LEI system (GLEIS):

- Regulatory Oversight Committee (ROC), with ultimate responsibility for the governance of the global LEI system;
- Global LEI Foundation (GLEIF), operating the Central Operating Unit (COU) and having responsibility for delivering high quality operations;
- Local Operating Units (LOU), local implementers of the global system and providing the primary interface for entities wishing to register for an LEI.

These recommendations were endorsed by the G-20 in November 2012 and the ROC took over the responsibility for development and implementation of the Global LEI System. The FSB Secretariat provides the stand-up support to this new organization. The Global LEI Foundation (GLEIF) was established in June 2014 as a not-for-profit organization overseen by the ROC to act as the operational arm of the Global LEI System. The foundation provides on their website a centralized database of LEIs and corresponding reference data. From 7 October 2015, new institutions that wish to become LEI issuers need to be accredited by the GLEIF which monitors their compliance with the standards of the Global LEI System.

The ROC publishes on a regular basis progress reports on the GLEIS and regulatory use of the LEI. As of 9 May 2017, over 500,000 entities from 195 countries had obtained LEIs from 30 operational issuers endorsed by the ROC or accredited by the GLEIF.

In addition to the work conducted on the LEI, the FSB had also to address the G-20 requirements agreed at the Pittsburgh Summit in 2009 on reporting of all OTC derivative transactions to a trade repository. Beyond the objective of enhanced transparency, another key purpose is to enable aggregation of data collected for an effective assessment of system-wide risks by the authorities. As a direct consequence the use of a Unique Transaction Identifier (UTI) to uniquely identify individual financial transactions, and a Unique Product Identifier (UPI), to uniquely identify OTC derivative products, has been introduced for the reporting to trade repositories.

When mandatory reporting started to apply it rapidly appeared that standardization in this area was crucial to ensure consistency at the international level and enable at the very end effective aggregation of data collected. The International Swap and Derivatives Association (ISDA) has worked with market participants to develop the standards to address the

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5 Available at: https://www.gleif.org/en
creation and exchange of a single UTI for global reporting. The global UTI standard “Unique Trade Identifier (UTI): Generation, Communication and Matching” as of 20 July 2015⁶ outlines the standard that is broadly in use by the industry. The guideline provided in the global UTI standard is enhanced and maintained by ISDA who continues to work with global regulators on adoption of a universal standard.

In parallel, international bodies have undertaken the following actions:

- In 2012, the then CPSS-IOSCO⁷ issued a report on OTC derivative data reporting and aggregation requirements (“Data Report”)⁸. A second report on authorities’ access to trade repositories (“Access Report”) was released in 2013⁹;
- In 2014, the FSB published a feasibility study on the approach to aggregate OTC derivative data for both UTI and UPI;
- In December 2015, the CPMI-IOSCO issued a consultative report on harmonization of the UPI¹⁰, closely followed by a second report in August 2016¹¹;
- On 28 February 2017, CPMI-IOSCO published Technical Guidance on the Harmonization of the UTI¹² which detailed how a UTI should be created and which entity in the life cycle of a trade would be responsible for the creation of the UTI. CPMI-IOSCO settled on the LEI as the “mint” value which would be a prefix to be concatenated with a value generated by the creator of the UTI. While very close to the ISDA guidance, the CPMI-IOSCO guidance does vary, especially in determining who creates the UTI which can create issues as workflows have been established that align with the ISDA guidance.
- On 13 March 2017, the FSB published a new consultation about UTI governance¹³. FSB recommended ISO as the keeper of the standard, local authorities as the implementers and some international body to coordinate among the local authorities going forward.

Additional work is still required for the determination of a full standardized and consistent framework on the creation, use and governance of UPI and UTI. A successful outcome is crucial in this area to ensure quality of collected data, enable authorities to aggregate these data and thus have a right interpretation in terms of systemic risks, and finally avoid costs too burdensome for all industry participants.

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⁷ In September 2014, CPSS changed its name to the Committee on Payments and Market Infrastructures (CPMI).
⁹ See CPSS-IOSCO (2013), Authorities’ access to trade repository data; available at: http://www.bis.org/cpmi/publ/d110.pdf
**CPMI-IOSCO PFMIs**

The report issued by the then CPSS-IOSCO in April 2012 on Principles for Financial Market Infrastructures\(^{14}\) (PFMIs) was designed to create a unified set of principles for payment systems, settlement systems, CSDs, CCPs and trade repositories to provide greater consistency in oversight and regulation of these FMIs globally. More concretely the main objective is to manage properly financial market infrastructures with an effective monitoring of the significant risks they can pose to the financial system (and be a potential source of contagion), particularly in periods of market stress.

The report contains 24 principles and mainly focuses on following aspects:

- Stricter requirements on existing principles about governance, credit risk management, liquidity risk management, mitigation of operational risk and links with other interdependences among FMIs, and transparency (i.e. disclosure rules, key procedures and market data);
- New principles on segregation and portability, general business risk and tiered participation arrangements.

In parallel, a new type of FMI was created: Trade repositories in the context of mandatory reporting of OTC derivatives.

Most of the PFMIs have been incorporated by relevant authorities in their legal and regulatory framework, as described in Chapter 2 on regional developments. All types of FMIs have also undertaken structural actions to comply with the PFMIs.

Since then, CPMI-IOSCO have been monitoring the PFMIs implementation with annual level 1 assessments which reflect the status of jurisdictions’ legal, regulatory or policy frameworks on the implementation of the PFMIs. Main conclusions of the reports published so far are that jurisdictions implement the PFMIs in different ways, with some using a policy-based approach (i.e rely on a policy statement as the primary tool for adopting the PFMIs), some using a rule-based approach (i.e. rely on rules and/or regulations corresponding to the PFMIs) and others combining these two approaches. These annual assessments are based on each jurisdiction’s self-assessments on the status of its progress in adopting the legislation and other policies relevant to its implementation of the PFMIs for each FMI type. Overall, **two thirds of the jurisdictions in scope have now achieved the highest implementation rating for all FMI types**, with regular progress achieved over the last 4 years.

Among the wide range of principles adopted by CPMI-IOSCO, the most transforming ones relate to the following aspects:

- For CCPs, most significant enhancements have been in the area of governance of risk management, including enhanced processes for approving changes to risk management practices, more formalised and comprehensive documentation of risk management frameworks, and the establishment of new risk committees with stakeholder representation. Other significant changes relate to their risk management practices, e.g. implementation of new “Cover 2” liquidity and credit coverage targets; implementation of new risk monitoring and risk management systems; enhanced model validation, testing and review processes; introduction of new margin methodologies or enhancement of existing margin methodologies to address matters such as procyclicality; and implementation of comprehensive recovery planning arrangements.\(^{15}\)

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\(^{14}\) See CPSS-IOSCO (2012), Principles for financial market infrastructures; available at: [http://www.bis.org/cpmi/publ/d101a.pdf](http://www.bis.org/cpmi/publ/d101a.pdf)

\(^{15}\) See BIS (2016), Implementation monitoring of PFMI: Level 3 assessment – Report on
➢ For CSDs, the focus is on implementing appropriate rules and procedures to help ensure the **integrity of securities issues and minimize and manage the risks associated with the safekeeping and transfer of securities** (e.g. segregation of assets). As a matter of example, CSDs should maintain securities in an immobilised or dematerialized form for the transfer by book entry and above all dispose of recovery and resolution plans. Enhanced rules on governance and general organisation have also been adopted by most CSDs.

➢ The introduction of trade repositories is also of course a tremendous evolution for the sake of transparency and profoundly impacts the level of information provided by the industry as a whole on transactions and their main features.

**Basel III**

Basel III is probably the most structuring set of reforms introduced for the monitoring of the banking sector. The measures adopted by the Basel Committee on Banking Supervision (BCBS) aim mainly to (i) improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source (Pillar 1), (ii) improve risk management and governance (Pillar 2), and (iii) strengthen banks' transparency and disclosures (Pillar 3). New rules on liquidity monitoring and supervision have been adopted with the introduction of the Liquidity Coverage Ratio (LCR) to face a stressed market on the short term, and the Net Stable Funding Ratio (NSFR) on a longer term perspective.

A specific framework for global systemically important banks (G-SIBs) supplements these requirements with the introduction of higher loss absorbency capacity to reflect the greater risks that they pose to the financial system.

Most BCBS recommendations were published across 2011 and subsequently completed in the following years. Main elements of the Basel III framework are presented below:

The following link provides further details:
http://www.bis.org/bcbs/basel3/b3summarytable.pdf

From a post-trade perspective, when securities services providers have a banking license, they have to comply with the Basel III framework. As an illustration, securities services providers need to **assess the capital consumption resulting from the application of the liquidity and leverage ratios on their activities**, by taking into account in the numerator and denominator calculation the types of counterparties they serve and the maturity of their operations. Another impacting BCBS new provision relates to the G-SIB specific framework and to the new capital constraints on clearing activities. As a summary, the main impacts are:

➢ For global custodians who are part of a G-SIB, assets under custody (AuC) are in the list of criteria to be taken into consideration for calculation of the overall capital requirements for this category of banking institutions. Actually they are listed as a key component for the “**substitutability** indicator”, one of the 12 indicators used to measure each bank’s scoring to compare the weight of the bank to the total weight of the 75 largest banks sample. As a result additional capital buffers are to be provided at the G-SIB level in order to reduce the probability and the extent of its failure. In fact these requirements are also applicable to some FMIs based on their systemic importance.

➢ Basel III contains a framework for calculating the **counterparty credit risk associated with exposures to CCPs and incentivize clearing through CCPs**. It takes into account the clearing member exposure to the CCPs where it has a

*the financial risk management and recovery practices of 10 derivatives CCPs; available at:
http://www.bis.org/cpmi/publ/d148.pdf*
membership, both in relation to own account positions and positions taken in the course of providing clearing services for clients. In addition it captures the clearing member exposure to its clients (and vice versa). Even if final rules adopted on this part in April 2014\textsuperscript{16} are less punitive than those initially proposed in July 2012, they have significantly increased the \textbf{capital required from clearing members to cover their exposures to CCPs}. The distinction between Qualifying CCPs (QCCPs) and non QCCPs is a key parameter in the calculation of the corresponding capital requirements. An explicit cap on the capital charges applied to bank exposures to QCCPs and specific treatment for multi-level client structures have also been inserted in the final standards. However the additional charge in capital is substantial for all clearing members who have reviewed the opportunity to remain in this business.

Another area where securities services providers need to keep scrutinizing developments in the BCBS is the risk coverage part with review of rules currently applied to assess the various categories of risks. The Basel Committee has issued a series of consultation papers\textsuperscript{17} to introduce a revised set of standardized approaches to credit, market and operational risks with a strong pressure to reduce (or stop) the use of internal model based approaches. Banks are expected to reduce significantly the amount of risk weighted assets (RWAs) through the use of internal models and with potentially highly diverging approaches. Actually, one of the Basel Committee’s key objectives is also to facilitate comparison between banks and to prevent the maintenance of the universal bank model.

Two main areas where global custodians may suffer from this new trend are (i) \textbf{measurement of credit risks} (when they provide credit lines to their clients for the clearing and settlement of their transactions) and (ii) \textbf{measurement of operational risks} where use of internal models may be extensive today.

Negotiations in the Basel Committee are currently blocked, mainly for political reasons. There is still uncertainty about when an agreement will be reached and what will be its final content. However there is no doubt that the existing framework on risk assessment will not survive and that strong incentives (not to say constraints) to restrict the use of internal models will be adopted to a large extent.

\textbf{1.1.2 New Initiatives Launched Over the Last 5 Years}

New trends have also emerged over the last years to complete the regulatory framework on resilience and financial stability. They mainly refer to the Shadow Banking System and to Recovery and Resolution plans for FMIs.

\textbf{FSB recommendations to strengthen oversight and regulation of shadow banking}

The FSB was mandated by the G-20 to work on “Shadow Banking” following the Seoul Summit held in November 2011. Consequently the FSB, mandated by the G-20, developed

\begin{itemize}
\item \textsuperscript{16} See BCBS (2014), \textit{The standardized approach for measuring counterparty credit risk exposures}; available at: \url{http://www.bis.org/publ/bcbs279.pdf}
\item \textsuperscript{17} See BCBS (2014), \textit{Capital floors: the design of a framework based on standardised approaches}; available at: \url{http://www.bis.org/bcbs/publ/d306.pdf}
\item See BCBS (2015), \textit{Revisions to the Standardised Approach for credit risk}; available at: \url{http://www.bis.org/bcbs/publ/d347.pdf}
\item See BCBS (2016), \textit{Reducing variation in credit risk-weighted assets – constraints on the use of internal model approaches}; available at: \url{http://www.bis.org/bcbs/publ/d362.pdf}
\item See BCBS (2016), \textit{Minimum capital requirements for market risk}; available at: \url{http://www.bis.org/bcbs/publ/d352.pdf}
\item See BCBS (2017), \textit{Simplified alternative to the standardised approach to market risk capital requirements}; available at: \url{http://www.bis.org/bcbs/publ/d414.pdf}
\end{itemize}
some recommendations to strengthen the oversight and regulation of the Shadow Banking system by defining Shadow Banking as “credit intermediation involving entities and activities (fully or partly) outside of the regular banking system”. To this end, the FSB has created a system-wide monitoring framework to track developments in the shadow banking system with a view to identifying the build-up of systemic risks and enabling corrective actions where necessary (e.g. annual shadow banking monitoring exercise). It also identified in its initial report on the Shadow Banking System published in November 2011 five different workstreams for which oversight and regulation need to be strengthened to mitigate the potential systemic risks associated with Shadow Banking:

- Mitigating the spill-over effect between the regular banking system and the Shadow Banking system;
- Reducing the susceptibility of money market funds (MMFs) to “runs”;
- Improving transparency and aligning incentives associated with securitisation;
- Dampening pro-cyclicality and other financial stability risks associated with securities financing transactions;
- Assessing and mitigating systemic risks posed by other shadow entities and activities.

Since then, the FSB has published every year the results of its monitoring exercise on the Shadow Banking system, providing information on state of progress for the five workstreams mentioned above and on data reflecting the size of these non-banking activities and actors. The FSB’s latest report was published in May 2017.

From a post-trade perspective, the most impacting areas are those relating to Money Market Funds (MMFs) and Securities Financing Transactions (SFTs). On MMFs, the objectives were to analyse the risks that MMFs pose to financial stability and develop a range of policy recommendations to address those risks. Even if the MMFs did not cause the financial crisis, concerns remained regarding the stability of the money market fund industry and the risks it may pose for the broader financial system. There was notably a strong focus on MMFs with constant Net Asset Value (CNAV). After a consultation paper issued in April 2012, IOSCO published its recommendations for MMFs on 9 October 2012. The report underlined that reforms had already been undertaken on MMFS to better assess and monitor the associated risks (notably in the US and in Europe), however, it also concluded that further standards should be introduced to better address the vulnerabilities presented by these types of funds. As a result 15 recommendations were adopted and mainly relate to the following aspects:

- Limitations to the types of assets MMFs may invest in and the risks they may take;
- Valuation of assets held in MMFs and its periodic review by a third party;
- Liquidity management and tools to face redemption pressures and exceptional market conditions;
- Sound policies and procedures to know their investors;
- Periodic conduct of stress testing;

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Specific measures for MMFs with a CNAV (with potential conversion to floating/variable NAV);
- Use of rating;
- Disclosure to investors;
- MMF’s practices in relation to repos.

On 2 September 2015, IOSCO published a report on the peer review of MMF Regulation\textsuperscript{22} and concluded in brief that, even if some progress was made in the adoption of new rules on MMFS, the \textbf{effective implementation varied between jurisdictions}. For the largest jurisdictions, only the US reported having final implementation measures in all areas whereas the EU and Asia were still in the process of developing and finalising relevant reforms. Implementation progress was less advanced for jurisdictions with smaller MMF markets. Since then, the EU has adopted the final version of the MMF Regulation as described below in the EU section.

Securities Services providers need to assess how new rules on the MMFs will impact their services to clients when acting as a fund depositary and /or a fund administrator (for the Net Asset Value calculation and production of data to assess the risk associated with these types of investment funds).

\textbf{On SFTs}, the FSB published different sets of recommendations which mainly relate to transparency for these transactions, to minimum standards to be applied to haircuts for non-centrally cleared SFTs and to the use of key indicators to assess the use and volumes of these transactions by the financial sector:

- In August 2013, the FSB adopted \textbf{11 Recommendations} to address the risks inherent to securities lending and repurchase agreements\textsuperscript{23}, related to the \textbf{transparency of the securities financing markets}, disclosure to investors and re-hypothecation.
- In addition the FSB published in November 2015 its final report on (i) \textbf{Standards and Processes for Global Securities Financing Data Collection and Aggregation}\textsuperscript{24}; and (ii) its report on Regulation framework for \textbf{haircuts on non-centrally cleared securities financing transactions}.
- Lastly the FSB published two other reports on SFTs on 25 January 2017. The first one about the \textbf{re-hypothecation of client assets}\textsuperscript{25} examines the possible harmonisation of regulatory approaches to the re-hypothecation of client assets and any residual financial stability risks associated with collateral re-use. As a general conclusion the FSB states that there is no immediate case for harmonising regulatory approaches to re-hypothecation while encouraging authorities to provide a common framework with respect to re-hypothecation of client assets. The second report


refers to the **collateral re-use** and comes to the conclusion that there is still a lack of clear understanding of global collateral activities in the securities financing markets. As a result the FSB introduces new standards on collateral data collection and aggregation. Some metrics, calculated at both local and global level, should allow measuring of collateral re-use, concentration of re-use activities, collateral circulation length, and the collateral multiplier (which constitutes a measure of velocity, but at the global level only).

In addition to its core services, the securities industry has developed a wide range of services around the use of SFTs for various kinds of reasons (such as increasing the profitability of securities portfolios held by their clients; handling of settlement fails; collateral transformation and optimization in a context of increasing collateral demand). Consequently the emergence of this framework is of upmost importance for securities services providers that may be impacted by any new rules on re-use of collateral and transparency to end-clients.

**FSB Key Attributes of Resolution Regimes for Financial Institutions**

The FSB main objective on this part is to allow authorities to resolve financial institutions in an orderly manner without contribution from taxpayers. This should be achieved while maintaining continuity of financial institutions’ vital economic functions.

The FSB started to look at these attributes for banking institutions, with publication of its first report in October 2011. The report addressed **12 different key attributes related to this type of destressed scenario** with strong focus on resolution authorities and resolution powers; set-off, netting, collateralization, segregation of client assets; recovery and resolution planning; and cross-border aspects.

One key challenge for the FSB was to ensure effective and consistent implementation across jurisdictions using different national legal systems and market environments. Sector-specific considerations were also to be taken into account.

For all these reasons, it was agreed in October 2011 that further guidance should be developed in the following years, through additional work with FSB members. As a consequence, the FSB adopted additional guidance in October 2014 that elaborates on key attributes relating to information sharing for resolution purposes and sector-specific guidance that sets out how these attributes should apply for insurers, financial market infrastructures and the protection of client assets in resolution.

Global custodians, as part of banking institutions, are now subjected to this new framework. A lot of work has been performed notably to **produce individual recovery and resolution plans** which are transmitted to recovery and resolution authorities on a confidential basis and which need to be updated yearly. In these plans a strong focus is made on critical functions and on options to be applied to ensure their continuity in case of both recovery and resolution scenarios.

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As for banking institutions, international bodies have raised the question on the **systemic risk FMIs' failure could pose to the financial system**. This issue was initially addressed in the CPMI-IOSCO PFMI with in particular the principles relating to the default waterfall process for CCPs (see above). However it was judged necessary to produce additional guidelines to properly address this risk of failure, notably due to the systemic risk resulting from mandatory clearing of OTC derivative contracts in CCPs.

CPSS-IOSCO issued a first consultation on the recovery part in July 2012\(^{30}\) whereas the FSB consulted on resolution plans in August 2013\(^{31}\). The approach adopted was very close to the one retained for the specific case of banking institutions, as for instance the need to identify critical functions and to ensure that their provisions is maintained in case of failure. Similarly the spirit of these plans is to establish recovery plans that should result in avoiding to move into the resolution phase, thanks to the use of the right recovery tools and relevant incentives for all participants. Lastly management of the recovery phase is under the responsibility of the FMI management team whereas the resolution phase is conducted by the resolution authority designated to make decisions in this scenario. However, it was also clear that specificities of FMIs should be taken into consideration and that a pure copy-paste option was not envisageable.

As a result, **the CPMI-IOSCO issued its guidance on both the recovery planning process and the content of recovery plans in October 2014**\(^{32}\). The report is structured around four main sections which aim at providing guidance on the development of comprehensive and effective recovery plans:

- Recovery planning with various elements on the importance to develop such plans (from a risk perspective) and the role of the various stakeholders;
- Recovery tools – general considerations;
- Specific recovery tools for FMIs.

In parallel, the **FSB developed a set of key attributes for effective resolution regimes for FMIs (also published in October 2014)** as part of the 2014 "Key Attributes of Effective Resolution Regimes for Financial Institutions” document mentioned above\(^{33}\). After reminding the objectives of the key attributes, the report presents exactly the same attributes as those identified for financial institutions (as described above), while taking into account the specificities of FMIs. It is clearly mentioned in the report that specificities of each type of FMIs and individual institution specificities need to be properly taken into consideration when defining the best approach for each FMI resolution.

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\(^{32}\) See CPMI-IOSCO (2014), *Recovery of financial market infrastructures*; available at: [http://www.bis.org/cpmi/publ/d121.pdf](http://www.bis.org/cpmi/publ/d121.pdf)

These guidances were recently both completed by additional CPMI-IOSCO and FSB publications:

- In August 2016, CPMI-IOSCO issued a consultative report on resilience and recovery of CCPs. The purpose of this report was to seek further comment on the principles and key considerations in the PFMI regarding the financial risk management of CCPs, with questions on:
  - Governance;
  - Credit and liquidity stress testing;
  - Coverage of credit and liquidity exposures (including in extreme market conditions);
  - Margin systems;
  - CCPs’ contributions of financial resources to losses;
  - Recovery.

  For each topic, CPMI-IOSCO proposed a number of guidance submitted to comments. The consultation was closed on 18 October 2016, a next CPMI-IOSCO report is still expected.

- In August 2016, the FSB also issued a discussion note on essential aspects of CCP resolution planning. After taking into consideration comments received to this note, the FSB published in February 2017 a draft guidance on CCP resolution and resolution planning for consultation. The guidance covers a number of aspects which authorities should consider when developing frameworks for resolving failing CCPs, including:
  - Policy objectives for CCP resolution to maintain financial stability;
  - The powers that resolution authorities should have to maintain the continuity of critical CCP functions, return the CCP to a matched book and address default and non-default losses, including potential indicators for considering when a CCP should enter resolution;
  - Use of loss allocation tools in resolution and provisions necessary to protect creditor rights so the triggering of resolution by authorities does not leave creditors worse off than if the authorities had not stepped in;
  - Steps authorities should take to establish crisis management groups for CCPs that are systemically important in more than one jurisdiction, develop resolution plans and conduct resolvability assessments.

  This consultation was closed on 13 March 2017, the FSB has not published so far its conclusions following the contributions received to the consultation.

As a preliminary conclusion on this part, it appears that further work is to be carried out on these recovery and resolution plans for FMIs. At this stage there has been strong focus on CCPs, it is not clear whether additional guidance will be developed for other FMIs and if yes in which timeframe. There are still intense discussions regarding key aspects such as what should be the extent of the resolution authorities, which tools should be used and how should loss allocation be achieved, how to deal which cross-border situations and how to handle the specific case of non-default losses. Whatever the final rules adopted, both FMIs themselves, but also their participants and final users may be significantly impacted.

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1.2 International Initiatives on Tax Evasion

**FATCA**

The first initiative on this topic was launched in the US with the Foreign Account Tax Compliance Act (FATCA) enacted in March 2010 and works to promote tax transparency, by addressing US taxpayer abuse through use of offshore bank accounts.

Under FATCA, Foreign Financial Institutions (FFIs) are required to register with the IRS and report to the IRS accounts held by American citizens and residents. The penalty for failure to identify and report information on US account holders is a 30 percent withholding tax imposed on material portions of the foreign bank’s US income. Though previous know-your-customer rules require some accounts to be reviewed periodically, **FATCA requires institutions to identify changes on a continuous basis** in order to ensure these changes do not trigger a review of the US or non-US status for that specific customer.

After several delays, **FATCA implementation began in phases in July 2014** and a series of national tax authorities implementing FATCA-like requirements have emerged. To date, more than 113 countries have enacted or signed Inter-Governmental Agreements (“IGAs”) Model 1 or 2 and additional countries have agreements in place that are treated as complying with FATCA:

- The Model 1 IGA requires FFIs to report all FATCA-related information on US account holders to their own governmental agencies, which would then report the FATCA-related information to the IRS. Some Model 1 IGAs are reciprocal, requiring the US to provide certain information about residents of the Model 1 country back to the Model 1 country in exchange for the information which that country provides to the US;
- The Model 2 IGA on the other hand requires FFIs to report information directly to the IRS.

Other major steps in the FATCA implementation are:

- **FATCA reporting requirements** are to be implemented in phases starting in 2015 through 2019. Effective implementation has appeared to be quite challenging on many aspects (as developing new systems to perform Gross Proceeds Withholding).
- **Cross border reciprocity** in respect to the disclosure of information under certain Model 1 IGAs also remains a challenge for the industry as a whole.

**OECD Initiative – Common Reporting Standard (CRS)**

The Automatic Exchange of Information (AEOI) is a separate initiative from FATCA, initiated at the international level by the OECD (Organisation for Economic Cooperation and Development), also in **view of preventing tax evasion and eventually increasing tax revenues**. The full version of the Standards for Automatic Exchange of Financial Account Information in Tax Matters was released in July 2014 (and updated on March 27, 2017)

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36 See H.R. 3933 — 114th Congress: 179 Act; available at: https://www.congress.gov/111/bills/hr3933/BILLS-111hr3933ih.pdf
and establishes common rules for the reporting of client assets and income to local tax authorities, in order to prevent tax evasion.

Under AEOI, Financial Institutions (FIs) are required to implement due diligence processes to:

- Identify new and pre-existing account holders as well as entities under foreign control;
- Collect their tax residence;
- Provide the relevant tax authorities with information on clients’ assets, income payments and trade flows during the fiscal year.

The OECD has proposed a framework based on FATCA Model 1 IGAs. The reference document, titled “Standard for Automatic Exchange of Financial Account information in Tax Matters”\(^{39}\), includes:

- The Model CAA (“Competent Authority Agreement”) which defines the principle of the AEOI intergovernmental agreements;
- The Common Reporting & Due Diligence Standard (CRS) which defines reporting obligations, due diligence and reporting exemptions.

All FIs, including custodians, depositaries, some investment entities and some insurance companies are in scope. 98 jurisdictions have committed to implement the AEOI, of which 85 have already signed the multilateral AEOI CAA (as of November 2016). Most of the signatory jurisdictions have committed to the 2017 reporting timeframe.

Accounts maintained in the US are not impacted by the new framework as the US has not signed the multilateral agreement.

For the first reporting group of jurisdictions, main steps for effective implementation are as follows:

- January 2016 – Due diligence begins for on-boarding new clients;
- End 2016 – Due diligence completed for individual high value pre-existing accounts;
- September 2017 – FIs required to report to their local tax authorities which will then first issue AEOI reporting;
- End 2017 – Due diligence completed for all remaining accounts.

For those jurisdictions who have committed to 2018 reporting, the deadlines above are extended by one year.

While the US and OECD share the same objective of reducing tax evasion through delocalization of cash flows, implementing measures are not exactly the same and may lead to duplication of duties to be performed. Below are a few examples of elements which differ between FATCA and AEOI rules:

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In FATCA a key criteria is the citizenship of clients (US citizens wherever they live) whereas in the AEOI this is the fiscal residence (different from the country where the account is opened);

FATCA contains a de minimis rule ($50,000 for individuals) while such rule is not foreseen in the AEOI;

No withholding tax is applied under AEOI whereas a punitive tax (30%) is to be paid by non-compliant FFIs and recalcitrant clients according to FATCA;

FATCA is based on registration with the IRS whereas registration is not required under AEOI. AEOI is based on systematic self-certification for new clients or existing clients intending to open a new account.

These gaps add to the complexity that intermediaries face with the implementation of these new requirements. In the end compliance with these new frameworks is very burdensome for intermediaries on several aspects.
2. Regulatory Developments by Region

2.1 Developments in the USA

2.1.1 Transposition of the G-20 Agenda

Most of the G-20's recommendations have been implemented in the US through the Dodd-Frank Act. Since its passage into law in July 2010, as of Q3 2016, more than 70% of Dodd-Frank required rulemakings have been finalized and rules have been proposed for an additional 9%, leaving approximately 20% to be enacted.

It is possible, however, that Dodd-Frank or some of the Dodd-Frank implementing regulations could be modified in the relatively near future. President Donald Trump has promised to advance a de-regulatory agenda and to “dismantle” Dodd-Frank. In an Executive Order, President Trump laid out his principles for financial regulation and directed the Secretary of the Department of Treasury to review existing regulations and make recommendations about changes that should be made to ensure their consistency with his regulatory principles. The Secretary of Treasury has since begun publishing a series of reports calling for some regulatory changes and modification to Dodd-Frank. Congress is also considering potential changes to certain Dodd-Frank provisions. The House of Representatives has passed the Financial CHOICE Act, which would make significant changes to parts of Dodd-Frank, although it leaves intact the regulatory regime for swaps found in Title VII. The CHOICE Act, however, is unlikely to be considered by the Senate.

Resilience / Prudential Aspects

New developments have emerged regarding ensuring financial stability. Dodd-Frank’s Title I authorized the Financial Stability Oversight Council (“FSOC”) to determine whether a nonbank financial company’s financial distress could pose a threat to US financial stability, which could lead to enhanced supervision and prudential standards. Since 2012, FSOC has designated four non-bank financial companies as systemically important financial institutions (“SIFIs”), and in 2014, completed its first annual reevaluation of previous SIFI determinations. Additional US efforts to strengthen financial stability include:

- **Living Wills**: SIFIs and bank holding companies (“BHC”) with consolidated assets of $50 billion or more are required to submit living wills outlining plans for their orderly resolution in the event of financial distress or failure. Financial institutions began submitting their initial resolution plans in 2012, and several large global

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44 See FSOC (2012), *Nonbank Financial Company Designations*; available at: https://www.treasury.gov/initiatives/fsoc/designations/Pages/default.aspx
45 See FSOC (2012), *Nonbank Financial Company Designations*; available at: https://www.treasury.gov/initiatives/fsoc/designations/Pages/default.aspx
banking organizations undertook projects to improve resolvability after the Federal Reserve and FDIC identified shortcomings in August 2014. In April 2016, the FDIC and Federal Reserve provided firm-specific additional feedback on resolution plans.

- **Stress Testing**: Implementation of supervisory and/or company-run stress tests for SIFIs, BHCs and financial companies with more than $10 billion in total consolidated assets is underway.

- **Prudential Standards**: Dodd-Frank’s Title I also enhanced supervision and prudential standards. In April 2014, the FDIC issued a final rule on the implementation of Basel III regulatory capital standards, which revised risk-based and leverage capital requirements and was substantively identical to a joint final rule issued by the OCC and the Federal Reserve in October 2013. In September 2014, the OCC, the Federal Reserve and the FDIC adopted a final rule implementing a quantitative liquidity requirement consistent with the liquidity coverage ratio standard established by the Basel Committee on Banking Supervision.

### OTC Derivatives

Since the previous report, there has been significant activity regarding the regulatory framework for swaps and security-based swaps, including reporting, mandatory clearing, execution, and capital and margin requirements.

Regulators have continued to focus on mitigating risk, increasing transparency and ensuring the safety and soundness of financial markets. As primary regulators of the swap and swap markets respectively, the US Commodity Futures Trading Commission ("CFTC") and the US Securities and Exchange Commission ("SEC") continue to address and finalize mandatory Dodd-Frank rulemakings. Since the ISSA June 2012 Report, the CFTC and SEC have issued final rules and guidance to further define terms including “swap dealer,” “major swap participant,” “security-based swap dealer,” “major security-based swap participant,” and “eligible contract participant.”

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50 Additional U.S. prudential regulators include the Office of the Comptroller of the Currency; the Board of Governors of the Federal Reserve System (the Federal Reserve); the Federal Deposit Insurance Corporation ("FDIC"); the Farm Credit Administration ("FCA"); the Federal Housing Finance Agency ("FHFA"); and the National Credit Union Administration ("NCUA").


Swap Data Reporting and Identifiers

Per Dodd-Frank’s Title VII, all cleared and uncleared swaps are required to be reported to swap data repositories ("SDRs") and to date, four SDRs are provisionally registered with the CFTC. In October 2012, CFTC-mandated trade reporting began and on December 31, 2012, real-time price information became publicly available. In 2016, the CFTC implemented changes to reporting cleared swaps changing the flow of information for cleared swaps to trade repositories. The SEC has finalized rules regarding SB SDR registration and to date, two SB SDRs have submitted applications to the SEC. As the SEC has not completed certain rulemaking, reporting of SB swaps has not commenced yet.

Global efforts continue to advance legal entity identifiers ("LEI"), which allow for the unique identification of legally distinct entities that are counterparties to financial transactions. Regulators have promulgated rules requiring counterparties to OTC derivatives transaction to be identified by LEIs. The CFTC has mandated that all active swap counterparties overseen by the CFTC must use LEIs. The SEC has finalized SB swaps rules requiring counterparties to have LEIs.

Swap Execution

Dodd-Frank also required the registration of US platforms for swaps transactions, or swap execution facilities ("SEFs"), under CFTC oversight. In 2013, the CFTC adopted SEF registration and operation rules and issued final rules in 2012 regarding designated contract markets. In February 2014, the first trading mandate for cleared interest rate and credit default swaps ("CDS") was implemented.

Mandatory Clearing of Swaps

In November 2012, the CFTC established its first clearing determination under Dodd-Frank by requiring certain CDS and interest rate swaps to be cleared by registered derivatives clearing organizations ("DCO"). Mandatory clearing requirements for swap dealers, major swap participants and private funds active in the swaps market were implemented in March 2013. Currently, there are 15 CFTC-registered DCOs.
Meanwhile, the SEC continues to adopt rules for clearing SB swaps. In June 2012, the SEC established a process for clearing agencies to provide information to the SEC relating to mandatory clearing of security-based swaps that established a process for clearing agencies to provide information to the SEC about security-based swaps that the clearing agencies plan to accept for clearing, and in October 2012, the SEC established minimum standards for the operation, governance, and risk management practices of registered clearing agencies.

**Capital and Margin Requirements for Uncleared Swaps**

US regulations regarding capital and margin requirements for uncleared swaps have been adopted:

- In December 2015, the CFTC finalized initial and variation margin requirements for uncleared swaps. 64
- In June 2015, CFTC proposed a rule requiring covered swap entities to comply with margin rules for uncleared swaps in cross-border transactions and allow entities to comply with comparable margin requirements in a foreign jurisdiction as an alternative to complying with the CFTC’s margin rules for uncleared swaps. On December 2, 2016, the CFTC approved proposed rules for establishing capital requirements for swap dealers and major swap participants. 66
- In October 2012, the SEC proposed rules governing capital, margin and segregation requirements for SB swap dealers and major SB swap participants. 67 The SEC has not yet moved forward on a margin rulemaking for uncleared SB swaps.
- In October 2015, the Federal Reserve and the FDIC issued a joint final rule with the OCC, the FCA, and the FHFA to establish margin and capital requirements for registered swap dealers, major swap participants, SB swap dealers, and major SB swap participants. The final rule will phase in requirements between September 2016 and March 2017. 68

**Oversight of Systematically Important Financial Market Utilities (SIFMUs) – Recovery and Resolution Plans**

An enhanced regulatory regime for SIFMUs has also emerged. As outlined under Dodd-Frank Title VIII, FSOC designated eight SIFMUs, requiring the utilities to meet risk management standards and heightened oversight by US regulatory authorities including the SEC, CFTC and the Federal Reserve. As part of Title II, which focuses on orderly liquidation, the FDIC, in coordination with other relevant supervisors, is working to implement frameworks for the orderly resolution of SIFIs and SIFMUs.

Of the eight FSOC-designated SIFMUs, six are registered clearing agencies. While some agencies are dually registered with both the SEC and CFTC, the SEC serves as the super-
visor agency for four clearing agencies and the CFTC serves as the supervisory agency for two.70

The SEC and CFTC, with the prudential supervision of the Federal Reserve, are actively engaged in recovery and resolution planning efforts for certain US entities within their respective jurisdictions.71 Final and proposed rules by these agencies largely line up with the Principles for Financial Market Infrastructures ("PFMIs") published by the Committee on Payment and Settlement Systems and the Board of the International Organization of Securities Commissions ("CPSS-IOSCO"). The Federal Reserve finalized amendments to Regulation HH: Designated Financial Market Utilities in November 201472 and the CFTC approved its rules on Derivatives Clearing Organizations and International Standards in December 2013.73

US regulatory agencies have also promulgated standards regarding risk management procedures, margin and collateral requirements and capital requirements for SIFMUs. Since 2012, discussions progressed regarding requirements for derivatives central counterparties ("CCP") and in February 2016, the CFTC and the European Commission announced a common approach regarding requirements for CCPs. In March 2016, the CFTC approved a substituted compliance framework for dually-registered CCPs located in the EU.74

In March 2014, the SEC proposed standards for covered clearing agencies – those designated as systemically important or take part in complex transactions – including new requirements regarding their financial risk management, operations, governance, and disclosures to market participants and the public.75 The SEC has finalized the covered clearing agency rule,76 which will facilitate the SEC’s obtaining a determination of equivalence of its regulatory regime for CCPs under the European Market Infrastructure Regulation ("EMIR") and thus enable SEC-supervised CCPs to gain recognition as qualified CCPs under EMIR.

Regulations mandating stronger collateral requirements and the introduction of central clearing have created a challenging landscape that requires cross-border collaboration and industry solutions. For example, DTCC is developing a Margin Transit Service to streamline and automate collateral processing to help firms address challenges such as inefficient collateral management processes, increasing operations and financings costs, increasing collateral and liquidity demands, heightened risks and regulatory pressures.

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70 See https://www.sec.gov/News/PressRelease/Detail/PressRelease/1370541113410
72 See Financial Market Utilities, 12 CFR Part 234 (79 F.R. 65543 (November 5, 2014)), effective December 31, 2014 (referred to as "Regulation HH").
74 See http://www.cftc.gov/PressRoom/PressReleases/pr7342-16
75 See https://www.sec.gov/News/PressRelease/Detail/PressRelease/1370541113410
2.1.2 US Specific Developments

Equities and Fixed Income

Managing market structure risk remains a US regulatory priority. Infrastructure breakdowns – such as the May 2010 Flash Crash – have underscored the importance of addressing structural issues in equities markets. Industry, regulators and market participants continue to take steps to address these issues. The SEC, for example, has implemented rules promoting safe and orderly market operations, including:

- In May 2012, the SEC approved revisions to market-wide circuit breakers, which halt trading in National Market System ("NMS") securities in the event of extreme market volatility. The SEC also approved a Limit Up/Limit Down ("LULD") mechanism intended to prevent erroneous trades.
- In July 2012, the SEC adopted a rule requiring SROs to submit an NMS plan to create and maintain a consolidated audit trail (CAT) and in April 2016, published a proposed NMS plan for public comment.
- In December 2014, the SEC adopted Regulation Systems Compliance and Integrity ("Reg SCI") to reduce the occurrence of systems issues, improve resiliency when issues occur, and strengthen oversight and enforcement of securities market technology infrastructure.

The SEC also established in 2015 an Equity Market Structure Advisory Committee to provide perspectives and recommendations regarding the structure and operations of the US equities markets.

In October 2014, US Treasury securities, futures, and other related financial markets experienced an unusually high level of volatility and liquidity conditions were significantly strained. These events gave rise to a January 2016 US Treasury Department request for comment on the evolving structure of the Treasury market. To date, the focus of policymakers has been regulatory reporting for Treasury securities markets and the expansion of clearing to market participants who trade in Treasury securities.

Shortening the US Settlement Cycle

Since 2012, plans for moving to a two-day US settlement period have advanced. The US settlement cycle for equities, corporate bonds, municipal bonds, unit investment trusts, and financial instruments comprised of these security types (e.g. ADRs, ETFs), from the current cycle of trade date plus three business days (T+3) to trade date plus two business days (T+2). Shortening the US settlement cycle will help mitigate operational and systemic risk by reducing exposure between the parties to a trade, between the counterparties to the clearinghouse, and for the clearinghouse itself. In June 2015, the industry announced its intention to reduce the settlement cycle in the US from T+3 to T+2. In March 2016, the industry target date of September 5, 2017 for the US move to T+2 was announced. In March 2017, the SEC issued a final rule to amend Rule 15c6-1(a) of the Exchange Act.

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79 See https://www.sec.gov/news/pressrelease/2016-77.html
1934 to shorten the standard settlement cycle for most broker-dealer securities transactions. The new requirement will come into effect in September 2017.

**US Securities Financing Markets – Repo and Securities Lending Contracts**

US regulators continue to focus on market structure changes, including strengthening the repurchase ("Repo") and securities lending markets. Progress has been made and reliance on intraday credit from clearing banks has been reduced. However, risk regarding repo-related fire sales remains a financial stability concern.84

In 2009, the Federal Reserve Bank of New York sponsored the creation of the Tri-Party Repo Infrastructure Reform Task Force to develop a solution that would reduce reliance on intraday credit and increase risk management practices. The goal was to alleviate operational challenges and risks in the tri-party market and a February 2012 final report outlined task force recommendations.85

U.S. regulators continue to focus on market structure changes, including strengthening the repurchase ("Repo") and securities lending markets. In 2009, the Federal Reserve Bank of New York sponsored the creation of the Tri-Party Repo Infrastructure Reform Task Force to develop a solution that would reduce reliance on intraday credit and increase risk management practices. The goal was to alleviate operational challenges and risks in the tri-party market and a February 2012 final report outlined task force recommendations.86 Progress has been made and reliance on intraday credit from clearing banks has been reduced. However, risk regarding repo-related fire sales remains a financial stability concern.87

**Tax**

*IRC Section 871(m)*

Generally, dividends paid by a US domestic corporation to a non-US person are subject to a 30% rate of US withholding tax, subject to rate reduction by treaty. Prior to the enactment of Section 871(m) of the Internal Revenue Code (the Code), US withholding tax generally was not imposed on income earned by a non-US person on a swap or other derivative that referenced stock of a US issuer.

On September 17, 2015, the Internal Revenue Service (IRS) and the US Treasury Department issued final and temporary regulations (the Regulations) under Section 871(m) of the the Code that provide the rules for withholding on dividend equivalent payments on certain equity-linked instruments that reference US equity securities. These Regulations impose US withholding tax on certain amounts arising from derivative transactions over US equities when those payments are made to non-US persons. The Treasury and IRS released Notice 2017-42 (the 2017 Notice) on August 4, 2017, extending the transition period for applying certain parts of the Section 871(m) rules. New effective dates for US withholding tax:

- Applicable to delta one instruments that are Section 871(m) transactions issued on or after January 1, 2017
- Applicable to all other instruments subject to the rules issued on or after January 1, 2019
- Extends the simplified standard for withholding agents to combine transactions through 2018

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85 See https://www.newyorkfed.org/tripartyrepo/index.html
86 See https://www.newyorkfed.org/tripartyrepo/index.html
Extends the Qualified Derivatives Dealer (QDD) relief from dividend withholding tax in the dealer book through 2018. It also defers the QDD requirement to use a net delta calculation or to periodically review its QDD activities until 2019.

The 2017 Notice also states that the Treasury Department and the IRS continue to evaluate the administrative burdens present in the regulations and whether other changes might reduce unnecessary burdens.

### 2.2 Developments in Asia

#### 2.2.1 Transposition of the G-20 Agenda

As a consequence of the global financial crisis, Asian countries have experienced an extraordinary level of regulatory reform mainly in the over-the-counter (OTC) derivatives markets, aiming to reduce systemic risk, strengthen capital requirements and increase transparency. Contrary to the US and to the EU, adoption of corresponding rules has been fragmented, country by country.

The table below shows the regulations that are already completed and some key initiatives planned in Asia across 2017/18:

<table>
<thead>
<tr>
<th>Regulatory Initiatives</th>
<th>Jurisdiction</th>
<th>Description</th>
<th>Compliance Date</th>
</tr>
</thead>
</table>
| OTC Trade Repository   | Australia    | ➢ Phase 1: Australian Swap Dealers  
➢ Phase 2: Australian ADIs, AFS Licensee, CS Facility Licensee, Exempt Foreign Licensee, Foreign ADI with gross outstanding notional of > AU$50 billion as of 31 Dec 2013.  
➢ Phase 3A (Rates and Credit: Reporting entity holding more than > AU$5 billion as of 30 Jun 2014  
➢ Phase 3A (FX, Equity and Commodities): Reporting entity holding more than > AU$5 billion as of 30 Jun 2014  
➢ Phase 3B: Reporting entity holding < AU$5 billion total gross notional outstanding as at 30 June2014. | ➢ 01 Oct 2014  
➢ 16 Apr 2015  
➢ 12 Oct 2015  
➢ 04 Dec 2015 |
|                       | Hong Kong    | ➢ HK TR Interim Reporting: IRS & NDF for Licensed Banks  
➢ HK TR Phase 1: IRS & NDF (Booking and Trading Nexus)  
➢ HK TR Phase 2: All asset classes (Booking and Trading Nexus) | ➢ 13 Aug 2013  
➢ 09 Jan 2016  
➢ 01 Jul 2017 |
|                       | Singapore    | ➢ Phase 1A, 1B, 1C & 1D IRS & Credit Booking Nexus  
➢ Phase 2 FX (Booking Nexus)  
➢ Phase 3 FX, Credit & Rates (Trading Nexus)  
➢ Phase 4: All OTC Derivatives, under consultation compliance | ➢ 2014  
➢ 01 May 2015  
➢ 01 Nov 2015  
➢ 1H 2018 |
|                       | Korea        | ➢ OTC Derivatives, Listed Derivatives, Derivatives Linked Product | ➢ 2H 2018 |
|                       | Japan        | ➢ OTC Derivatives for Rates, FX, Equities, | ➢ 01 April 2016 |

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### Reporting to trade repositories

As part of the G-20 Regulatory Reform of the Global OTC Derivatives market, local regulators have developed their own regulatory regimes to introduce mandatory requirements for reporting specified OTC derivatives transactions to the designated trade repositories (TR) and swap data repositories (SDRs).

- **Australia Trade Reporting:** In compliance with its G-20 derivatives reform commitments, Australia has introduced obligations to report OTC derivative transactions. The Australian Trade Repository Rules provided for the implementation of reporting obligations in 3 phases for different types of reporting entities. To date, all product classes of OTC derivatives have been captured through phased-in mandatory reporting requirements as per rules set out by the Australian Securities and Investments Commission (ASIC). Foreign entities can satisfy ASIC reporting requirements by relying on alternative reporting through tagging the trade as ASIC reportable when reporting to a substantially equivalent foreign jurisdiction, e.g. EMIR, CFTC.

- **Hong Kong Trade Repository:** To meet international standards, the Hong Kong Monetary Authority has developed a Trade Repository in Hong Kong (HKTR), with a link between the HKTR and the CCP for OTC derivatives, the Hong Kong Exchanges and Clearing Limited (HKEx).

  At the same time, the HKMA worked with the Securities and Futures Commission (SFC) and other stakeholders to develop a regulatory regime for OTC derivatives markets (OTC Regulatory Regime) under the Securities and Futures Ordinance (SFO), including mandatory requirements for reporting specified OTC derivatives transactions to the HKTR and clearing specified transactions at designated CCPs. In June 2015, HKMA published the final reporting rules related to Phase 1 delivery, which involves the reporting of IRS and NDF to HKTR, which took effect in January 2016. This was followed by the publication of reporting rules in November 2016 for Phase 2 delivery which is due to commence in July 2017.

- **Singapore Trade Repository:** The local regulator Monetary Authority of Singapore ("MAS") has formed a working group to develop the legislative framework and detailed requirements for regulating the OTC derivatives market. To meet the MAS commitments to support the FSB goals on derivatives reforms, the MAS issued the final rules for OTC Derivatives Trade Reporting on Oct 31, 2014.

  So far, MAS already implemented Trade Repository reporting for Interest Rate, Credit, and FX derivatives “booked in Singapore”. As an extension, MAS mandated the reporting of Interest Rate, Credit, and FX derivatives “traded in Singapore” effective on November 1, along with the addition of additional reporting fields required for all three asset classes.

  In January 2016, the MAS consulted on the introduction of the final 2 asset classes, Equity and Commodity, as well as the addition of location fields and collateral
across all asset classes and an extension of the “traded in requirements” that will see the buy side captured for the first time. To date, this consultation has not been finalized.

- **Korea Trade Repository**: In response to G-20 Regulatory Reform, the Financial Services Commission (FSC) has designated the Korea Exchange (KRX) as a trade repository (TR) in August 2015 to collect, manage, and analyse data related to OTC derivatives transactions. The aim of FSC is to improve derivatives market monitoring and transparency.

  KRX has set up several task force meetings to consult with the industry to get a general view from market participants, however, a formalised consultation paper on specific action plans of an OTC derivatives market regime has yet to be released. As per various discussions, it is expected that KRX will subject dual sided reporting of OTC derivatives, Listed Derivatives and Derivatives Linked Products to mandatory reporting by T+1 cut off time.

  Commencement of OTC reporting is targeted for 2H 2018; however, the compliance date is to be determined. Market participants are advocating for at least 12 months lead time to get systems and infrastructure ready in order to adhere to the reporting obligations.

- **Japan Trade Repository**: In response to the G-20 Regulatory Reform of the Global OTC Derivatives market, the Financial Services Agency of Japan (“JFSA”) implemented the regulatory framework for its OTC derivatives market in April 2013. The regulations mandate Financial Instruments Business Operators (“FIBO”) and Central Counter Parties (“CCPs”) to report and store the OTC derivatives transactions to JFSA for 4 asset classes (i.e. Interest Rates, FX, Equities, and Credits). While FIBOs have options to report the trade data either directly to JFSA or through the designated Trade Repository, CCPs are required to report the trade data directly to JFSA. The regulatory framework of the Commodities asset class falls under the supervision of other regulators, namely the Ministry of Economy, Trade and Industry and Ministry of Agriculture, Forestry and Fisheries and the trade repository regime is yet to be implemented.

  The existing trade repository framework in Japan significantly deviates from those in other jurisdictions in terms of identifiers, data fields (e.g. valuation is not the required data field), and reporting formats (e.g. delta reporting, not the position reporting).

Monetary Authority of Singapore (MAS), Hong Kong Monetary Authority (HKMA), ASIC and Securities and Futures Commissions of Hong Kong (SFC) have the same requirement on reporting a single trade identifier that UTI should be agreed and reported. As Asia participants require further work to build new process and infrastructure to report a single agreed UTI, MAS and HKMA have granted a time limited relief from having to match and pair UTIs for all reportable transactions. However, since then, the MAS, ASIC and the HKMA have cooperated closely on the intention to adopt the CPMI-IOSCO standard, focussing particularly on ensuring that the “go live” date in the region was consistent. All currently have relief or no specific requirement to report a shared UTI. This relief is in place until October 2017, with dependency on the FSB consultation.

### Mandatory Clearing

- **Australia**: Australia Securities and Investments Commission (ASIC) have released rules implementing Australia’s mandatory central clearing regime for OTC derivatives. The ASIC Derivative Transaction Rules (Clearing) 2015 apply to transactions in OTC interest rate derivatives denominated in Australian dollars, and in US dollars, Euros, British pounds and Japanese yen (G4 interest rate derivatives) between OTC derivatives dealers. The clearing mandate applies to Australian and foreign financial
institutions that meet the clearing threshold of AU$100 billion for 2 consecutive
calculation periods. In September 2015, amendments to the Corporations Regu-
lations were made setting high-level parameters for the mandatory clearing regime
in Australia for OTC derivatives. ASIC’s derivative transaction clearing rules provide
the detail. They set out which entities and derivative contracts are covered by the
clearing mandate, the eligible central counterparties that may be used, alternative
clearing (allowing entities to comply with certain overseas clearing requirements)
and certain exemptions from the clearing mandate.

The first phase of the Australian clearing obligations commenced in April 2016, with
AUD denominated OIS and FRAs having a delayed start.

- **Hong Kong:** The Hong Kong Monetary Authority and the Securities & Futures
  Commission of Hong Kong published a final paper on Phase 1 clearing obligation for
certain standardised interest rate swaps (plain vanilla basis swaps, fixed to floating,
and overnight index swaps) in G4 currencies and HKD. Phase1 clearing focuses on
transactions which pose the greatest systemic risk, therefore only transactions be-
 tween major dealers will be subject to mandatory clearing. The clearing obligation
kicks in when either dealer is a prescribed person that has crossed the threshold of
US$20 billion gross notional threshold, excluding deliverable FX swaps and forward;
or when the transaction is entered with a HKMA named financial services provider
against a prescribed person which has exceeded the clearing threshold. All types of
OTC derivatives transactions (except deliverable FX forwards/swaps) will count
towards the threshold per entity i.e. no aggregation across group. HKMA/SFC
expect prescribed persons to confirm the nature of their counterparty through
counterparty representation letters.

Calculation period to start from September to November 2016, with first mandatory
clearing date commencing on 1 July 2017.

- **Singapore:** In line with the G-20 objectives and FSB recommendations on OTC
derivatives reforms, MAS consulted on proposed regulations for the mandatory
clearing of OTC derivatives.

The MAS intends to commence mandatory clearing by asset class, beginning with
interest rate derivative contracts, which are about 50% of all derivatives booked in
Singapore (by gross notional amount outstanding). The clearing of interest rate
swaps (“IRS”), which constitutes more than 90% of interest rate derivative con-
tracts booked in Singapore (by gross notional amount outstanding), would signi-
ficantly reduce systemic risks in the Singapore financial system. The MAS is con-
sidering subjecting IRS denominated in SGD, USD, EUR, GBP, and JPY to mandatory
clearing obligations. The MAS has proposed to subject derivatives contracts to the
clearing obligation where both transacting counterparties have booked their trades
in Singapore-based operations. The MAS is considering not subjecting derivatives
contracts which are traded in Singapore but booked elsewhere, such as into foreign
subsidiaries or foreign branches of local banks, to the clearing obligation at this
stage.

Compliance date is to be determined subject to MAS releasing the final paper on the
clearing obligations.

- **Japan:** JFSA implemented mandatory CCP clearing to FIBOs holding average
aggregate positions over 1 trillion Yen notional amount for plain-vanilla Interest
Rate and Index Credit products in November 2012. The FIBOs holding average

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aggregate positions of over 300 billion Yen became subject to the mandatory CCP clearing regulatory regime effective November 2015.

**Global Margin Programme**

In the pursuit of reducing systemic risk and promoting central clearing so to ensure appropriate collateral is available to offset losses caused by the default of a counterparty, all financial institutions and systematically important non-financial institutions will need to comply with uncleared margin rules as set out by the global policy framework set out by BCBS.

On 6 Dec 2016, The Australian Prudential Regulation Authority (APRA), the Hong Kong Monetary Authority (the HKMA) and the Monetary Authority of Singapore (MAS) announced implementation timelines for margin requirements and risk mitigation for non-centrally cleared derivatives, implementing an important component of the post crisis reforms agenda\(^89\).

The three Asian regulators aligned the implementation timeline for initial margin (IM) and variation margin (VM) for international consistency for non-centrally cleared OTC derivatives.

Initial margin is collateral collected or posted to cover potential losses arising from an event of default, whereas Variation Margin (VM) reflects the daily change in market value of the contracts, i.e. the daily gain or loss of a contract due to market movements.

Effective from 1 Mar 2017, derivative users in Japan implemented the VM requirements for all relevant non-centrally cleared transactions, however, Australia, Hong Kong and Singapore allowed for a six-month transitional period until 1 Sept 2017\(^90\).

Whilst the exchange of VM is fairly common practice across the derivative trading industry already, exchanging of IM is largely a new process for non-centrally cleared derivatives. There are many key considerations for implemented IM, including determining the appropriate IM calculation model, segregation of IM in an individual account, generally with a third party custodian and available immediately to the receiver in case of counterparty defaults, and prohibition of rehypothecation (to pledge as collateral that has already been pledged)\(^91\).

The Phase-in schedule for exchanging IM based on respective threshold is set out below:

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>1 Sep 2016</th>
<th>1 Sep 2017</th>
<th>1 Sep 2018</th>
<th>1 Sep 2019</th>
<th>1 Sep 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>AUD4.5T</td>
<td>AUD3.375T</td>
<td>AUD2.25T</td>
<td>AUD1.125T</td>
<td>AUD12B</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>HKD 24T</td>
<td>HKD18T</td>
<td>HKD12T</td>
<td>HKD6T</td>
<td>HKD60B</td>
</tr>
<tr>
<td>Singapore</td>
<td>SGD 4.8T</td>
<td>SGD 3.6T</td>
<td>SGD2.4T</td>
<td>SGD 1.2T</td>
<td>SGD13B</td>
</tr>
<tr>
<td>Japan</td>
<td>¥ 420T</td>
<td>¥ 315T</td>
<td>¥ 210T</td>
<td>¥ 105T</td>
<td>¥ 1.1T</td>
</tr>
</tbody>
</table>

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\(^{90}\) See [http://www.apra.gov.au/MediaReleases/Pages/16_52.aspx](http://www.apra.gov.au/MediaReleases/Pages/16_52.aspx)

2.2.2 Tax – OECD Initiative

**Common Standard Reporting (CRS)**

As presented in section 1.2, CRS is developed in response to the Organization for Economic Cooperation and Development (OECD) calls for jurisdictions to obtain information from their financial institutions and automatically exchange client account information with other jurisdictions to local tax authorities on an annual basis. It sets out the financial account information to be exchanged, the financial institutions required to report, the different types of accounts and taxpayers covered, as well as common due diligence guidelines followed by financial institutions.

56 Countries, including India & Korea, are early adopters to undertake first exchange of information by September 2017 on information from calendar year 2016. 38 countries, including Australia, China, Hong Kong, Indonesia, Malaysia and Singapore, are agreeing to undertake first exchanges by September 2018 on information from calendar year 2017.

2.2.3 Local Specific Initiatives

**Shifting to T+2 Settlement**

The aftermath of the global financial crisis brought into greater focus the need to harmonize post trade processes of securities settlement, reduce risks, optimize capital, and improve process efficiency of the transaction settlement, which brought on the move to shorten the settlement cycle to T+2.

A shorter settlement cycle is widely agreed to reduce the risk associated with settlement, in particular reducing operational and counterparty risk. Shortening the settlement cycle is expected to yield benefits such settlement efficiencies, increased market liquidity, lower collateral requirements and enhanced global settlement harmonization.

The intention is to mitigate and reduce the potential of systemic risk to all the market stakeholders with a focus on reducing credit, operational, counterparty exposure and any associated liquidity risk.

With the backing of market participant endorsement following broad market consultation in 2014, the financial services industry, in coordination with regulators, proposed to shorten the settlement cycle to T+2 by Q3 2017.

Within the Asian markets, Hong Kong, Korea, Taiwan to name a few are already on T+2 settlement. There are initiatives to shift additional Asian markets to T+2 to align with other major international markets. Australia, New Zealand & Vietnam implemented T+2 settlements for all cash transactions, bonds, warrants & Exchange Traded Fund (ETF) trades in early 2016.

In addition to AU, NZ and VN having implemented T+2 within their jurisdiction, a couple of countries are forming working group to assess the impact and implement a shortened settlement cycle.

The Japanese regulators have issued an interim report on the shifting of the Japanese equities settlement cycle to T+2. The final paper for assessment and implementation is expected to be released in Q2 2016. In the meantime, the settlement cycle for the outright Japanese Government Bond transactions will become T+1, effective trade date as of 1 May 2018.

The Indonesian capital market regulators (Indonesia Stock Exchange-IDX, Indonesia Central and Clearing Guarantee-KPEI, and Indonesia Central Securities Depository-KSEI) are conducting a survey with market participants covering aspects such as the requirement to change the existing end to end business process including pre-matching, confirmation from client/custodian, intraday availability, foreign exchange, funding, cost estimation to
accommodate the change, benefits that are expected, amongst other things, regarding their plan to shift the equity settlement cycle in Indonesia from T+3 to T+2.

**SGX Post Trade Enhancements**

In an effort to enable local brokers to increase operational efficiency and offer differentiated services to their customers, The Singapore Exchange (SGX) plans to implement a new generation of post-trade systems that will facilitate the clearing and settlement of trades as well as deliver the shares. The initiative is geared to have more transactions executed on exchange by differentiating the fees for on exchange and off exchange trades. The mandatory requirement to provide information in the Place of Trade and Transfer Type fields in the pre-settlement matching service (PSMS) will be implemented in Q2 2016.

**Asia funds passport**

Cross-border distribution of certain types of funds has long been feasible in the European Union, as discussed elsewhere in this paper. The benefits of cross-border fund distribution are increasingly being recognised in Asia too.

UCITS funds are recognised by regulators in a number of Asian markets and can benefit from favourable tax treatment. In particular, UCITS are sold widely into Hong Kong, Singapore and Taiwan, where there has been a high level of investment into offshore funds in recent years. By contrast, direct distribution of offshore funds is not permissible into China, Indonesia or India. These are clearly large retail markets. In the Association of South East Asian Nations (ASEAN) markets, offshore funds can be sold in some circumstances, but generally only via wrapper structures with local fund managers.

There has clearly been an increasing pool of financial assets in Asia in recent years, particularly bank deposits in China. Regional blocs like ASEAN have led to greater cooperation in capital markets and savings, and ASEAN has an objective to integrate capital markets including market access for investment funds. There is recognition that cross-border funds distribution gives populations access to more investment options, and creates opportunities for fund managers. Open ended company structures have been proposed in both Hong Kong and Singapore, forming part of a trend for regulators to take steps to develop their markets as fund domiciles. The launch of cross-border distribution regimes requiring local manufacture of funds may emerge. However, there are barriers to offshore funds: Taiwan is showing a preference for onshore funds, and Australian tax structures are more attractive for onshore than offshore funds. There is regulatory and industry awareness that cross-border distribution presents a number of challenges:

- Brand awareness
- Investor education
- Compelling proposition to invest overseas
- Navigating the rules
- Fair access.

Industry participants are working with regulators in the region to overcome these barriers, and to enable more efficient flows of cross-border capital into funds.

Three current regimes enabling cross-border investment fund distribution in Asia are:

- ASEAN Collective Investment Scheme (ASEAN CIS): This scheme is a cross-border fund distribution regime between Singapore, Thailand and Malaysia. It went live in August 2014 and 5 cross-border funds have been approved so far;
Asia Region Fund Passport (ARFP): 6 countries (Japan, Australia, New Zealand, South Korea, Thailand and the Philippines) have signed a memorandum of co-operation to join ARFP, with an expected launch in 2017. Singapore may also join;

Hong Kong-China mutual recognition of funds (MRF) – this scheme enables cross-border fund distribution between Hong Kong and China. So far, 6 Hong Kong and 37 China funds have been granted approvals.

Based on the above, possible distribution routes in Asia include:

- Set up in Singapore to access ASEAN;
- Set up in Hong Kong for access to China;
- Set up in Australia (or other member country) and market into ARFP countries.

Alternatively providers can await greater acceptance of UCITS in Asia, or merely work with the 3 countries (Hong Kong, Singapore and Taiwan) that currently allow UCITS to be marketed in their territory.

As a conclusion, unlike Europe with the EU, Asia has no supranational authority to impose cross-border funds distribution methods. Nevertheless, there are bilateral and grouped discussions that have produced good growth to date in establishing cross-border fund distribution, and this growth can be expected to continue.

2.3 Developments in Europe

2.3.1 Transposition of the G-20 Agenda

In the European Union (EU), a large proportion of the new regulatory initiatives launched in the aftermath of the financial crisis have been inspired by the 2009 G-20 requirements. Accordingly there has been a strong focus on systemic risk, increased transparency, strengthened resilience, safety and integrity of the financial system as a whole. CPMI-IOSCO Principles for Financial Market Infrastructures (PFMIs) have also been a key driver in this context, especially for the regulation of CCPs and CSDs.

Since the last ISSA Report in June 2012, the level 1 Legislation (adopted in the traditional co-decision process by the European Parliament and the Council and setting out framework principles) has been adopted for most of these initiatives. It has been supplemented by the publication of implementation measures (Level 2 measures). In most cases final reports have been issued by European Supervisory Authorities (ESAs) and transmitted to the European Commission for final adoption through publication of delegated acts. As a result the industry has globally entered into the implementation phase for the bulk of the financial reform, which is not completely finalised yet. (eg. the phasing-in of clearing obligation has only started in June 2016 and will include IRS and CDS products until mid 2019).

Transposition of international standards on OTC derivatives and financial market infrastructures, as defined by the FSB, BCBS and CPMI-IOSCO, has been achieved through three main legislative vehicles in the EU: **EMIR** (for OTC derivatives and PFMIs on CCPs), the **CSD Regulation** (for PFMIs on CSDs) and **MIFID2/MIFIR** (for mandatory execution of OTC derivative contracts on trading platforms).

On top if these initiatives, the EC published most recently its legislative text proposal for recovery and resolution plans for CCPs on 28 November 2017.
European Market Infrastructure Regulation (EMIR)

EMIR was published in the European Official Journal on 27 July 2012. However effective EMIR implementation started in March 2013 with a limited scope of application and entry into force occurred step by step according to the following phase-in calendar.

Risk mitigation techniques for non-centrally OTC derivatives

EMIR effective entry into force started in March 2013 with application of risk mitigation techniques for non-centrally cleared OTC derivative contracts, i.e. timely confirmation of all OTC derivative contracts, daily portfolios reconciliation and disputes mechanisms. As international standards on margin requirements for non-centrally cleared OTC derivatives were not adopted on that date, they were not part of this implementation phase (see below paragraph on this part).

Harmonised framework for CCPs

EMIR Regulation also contains structural rules regarding authorization and supervision of CCPs, requirements the CCPs have to comply with in terms of internal organization, risk management procedures, conflicts of interest, and interoperability arrangements between CCPs. Most of the corresponding provisions are a direct transposition of the PFMIs published by the CPMI-IOSCO.

In addition EMIR introduces some requirements for non-EU CCPs that wish to offer their clearing services in the EU. Equivalence determination and qualified versus non qualified CCPs. All EU CCPs have been re-authorized over the last years with update of their rule-books accordingly. For non-EU CCPs, the European Commission has produced equivalence decisions for almost all jurisdictions where major CCPs are located. In parallel ESMA has determined which CCPs are qualified CCPs and those which are not, with substantial impacts on capital requirements to cover the exposure to the non-qualifying CCPs.

Reporting to TR

After a long period of uncertainty (on both the timeline and the phase-in versus one-shot approach), mandatory reporting of all derivatives contracts (including listed derivatives contrary to other jurisdictions) to a trade repository started in February 2014, for all categories of underlying financial products. Eventually 7 trade repositories have been authorized by ESMA as being able to provide their services within the EU. It appeared quite rapidly that most financial participants encountered serious difficulties in their reporting obligation and that quality of data needed to be significantly improved. Therefore, finding solutions to improve the quality of reported data in increasing efficiency of the process has been a key topic raised by the EMIR review process, which started in 2015.

Mandatory clearing

Effective implementation of mandatory clearing is also phased in, depending on underlying products on one hand and categories of counterparties on the other hand (with identification of 4 categories). It started on 21 June 2016 for Interest Rate Products (IRS) for Category 1, with the following timeline at that moment:

<table>
<thead>
<tr>
<th>IRS</th>
<th>Category 2 – 21st December 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Category 3 – 21st June 2019</td>
</tr>
<tr>
<td></td>
<td>Category 4 – 21st December 2018</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CDS</th>
<th>Category 1 – 9th February 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Category 2 – 9th June 2017</td>
</tr>
<tr>
<td></td>
<td>Category 3 – 21st June 2019</td>
</tr>
<tr>
<td></td>
<td>Category 4 – 9th May 2019</td>
</tr>
</tbody>
</table>

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Due to the difficulty faced by some types of counterparties to comply with mandatory clearing (in particular small ones), the European Commission announced its decision to postpone the entry into force of mandatory clearing for Category 3 (whatever the cleared segment) to June 2019.

**Margin requirements for uncleared OTC derivatives**

Following the publication of international standards by the BIS and CPMI-IOSCO on these requirements in September 2013, it took almost three years for the ESAs to publish their final report on corresponding regulatory technical standards\(^{94}\). Finally the date for entry into force in the EU was defined as follows:

- Variation margin requirements: 1 March 2017 for all contracts and counterparties, except for contracts (on 1 January 2018)
- Initial Margin requirements: phase implementation which started on the 4\(^{th}\) February 2017

**EMIR Review**

Despite very limited implementation of most EMIR provisions, the EC published a public consultation on EMIR review in summer 2015 (as requested in Article 85 under the EMIR text). The EC released the main conclusions of responses received to the consultation in November 2016 by indicating that any revision of the existing regulation should be limited and targeted for two main reasons: First due to the limited implementation progress (as mentioned above) and secondly, to align with the new drivers as defined in the Capital Market Union (CMU) Project, i.e. (1) reduce impediments to financing of the real economy, (2) ensure proportionality of the regulatory framework; and (3) limit the compliance burden and avoid any unnecessary duplication of rules.

As a result the EC text proposal on EMIR review as issued on 4 May 2017\(^{95}\) completely reflects this general stance. Some exemptions would be granted to small counterparties and/or non-financial counterparties on mandatory clearing and reporting to trade repositories. Front-loading and back-loading should be removed and there should be a procedure to suspend temporarily the clearing obligation in the interest of financial stability. Central Counterparties are required to be more transparent about their initial margin (IM) models towards users and IM should be protected from CCP bankruptcy. The general scope of application should be extended to securitization vehicles and pension funds, whereas exempted from EMIR for three more years, they should eventually be subjected to the EMIR regime.

The EC published a second legislative text proposal related to EMIR on 13 June 2017\(^{96}\) which is exclusively about the supervision of CCPs. In brief ESMA powers should be extended in the case of EU CCPs to ensure greater coherence across the EU. In the case of non-EU CCPs, a distinction is made between “non-systemic” and “systemic” CCPs. For the latter enhanced supervision from EU authorities and central banks and stricter rules on consistency with the EU framework should be introduced at a minimum. For highly systemic CCPs re-localisation of clearing in Euro-denominated transactions into the EU may be the only way forward in order to continue providing the service to European market participants. Negotiations in the European Parliament and in the Council should start in Q3 2017.

A different timeline could apply for each part of review as the second text published by the European Commission holds a high political dimension in direct link with the vote for Brexit.


\(^{95}\) See https://ec.europa.eu/info/law/better-regulation/initiative/25623/attachment/090166e5b21c0862_en

\(^{96}\) See https://ec.europa.eu/info/law/better-regulation/initiative/113034/attachment/090166e5b5344dfa_en
CSD Regulation (CSDR)

The CSDR was adopted with two main purposes: first to regulate European CSDs with the introduction of a harmonised framework across the EU (on this part, several provisions allow to introduce some PFMIs by the CPMI-IOSCO); and, secondly, to improve safety and efficiency of settlement across Europe (with notably migration to T+2 settlement period, securities dematerialization and introduction of the new settlement discipline regime). More concretely the CSDR provides a set of common requirements for CSDs with provisions on authorization of CSDs, internal organization (i.e. rules on governance, risk management procedures and user committees), prudential requirements and passporting of services provided by CSDs. Regarding the settlement discipline regime, the objective is to prevent and address settlement fails with the mandatory implementation of a buy-in regime and a penalty mechanism across a wide range of securities. Lastly the text also includes new measures on internalized settlement (i.e. all settlement instructions take place outside a Securities Settlement System) with requirements on how to report internalised settlements to national regulators to allow proper risk monitoring.

The level 1 legislation was published in the Official Journal in July 2014\(^\text{97}\). ESMA's final report on implementing measures was submitted to the European Commission in September 2015\(^\text{98}\), except for the settlement discipline regime, which has been clearly the most contentious provision in the text (with strong opposition from the industry on a too strict approach). This topic was covered in a separate paper issued by ESMA in February 2016. In parallel the EBA was mandated to prepare some regulatory technical standards on two main topics: First minimum prudential requirements for all CSDs; secondly additional capital requirements for CSDs providing banking functions. The EBA final report was issued in December 2015\(^\text{99}\).

After a long stand-by period, the European Commission issued its draft delegated acts on all implementing measures (except the settlement discipline regime) on 11 November 2016. The final texts were published in the Official Journal in March 2017\(^\text{100}\), which concretely means effective start date by the end of 2017 with re-authorisation of European CSDs by their national competent authorities. Draft delegated acts by the European Commission on the settlement discipline are still to be published. On this part new rules should start to apply in 2019 (as recommended by ESMA in its final report), as for new provisions on internalized settlement reporting to national competent authorities.

MiFID 2 / MiFIR – Obligation to trade of OTC derivative contracts on trading venues

This G-20 commitment was not included in the scope of EMIR as trade execution aspects have already been addressed in MiFID 1 (Markets in Financial Instruments Directive). It was then logical to include this new requirement in the revision of MiFID.

Mandatory trade execution for certain OTC derivatives contracts -those that are both cleared through a central counterparty (CCP) and deemed sufficiently liquid- is introduced in Article 28 of MiFIR (Markets in Financial Instruments Regulation\(^\text{101}\)) by indicating that these contracts must be traded on a “trading venue”, i.e. on a regulated market, MTF (Multilateral Trading Facility), OTF (Organised Trading Facility), or equivalent third country venue when traded by relevant counterparties.

\(^\text{100}\) See http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0394&from=EN
\(^\text{101}\) See http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0600&from=EN
MiFIR specifies that subject to the trading obligation will be transactions concluded between:

- Financial counterparties\(^{102}\) as defined by the EMIR Regulation\(^ {103}\), broadly investments firms and credit institutions, and
- Non-financial counterparties\(^ {104}\) that meet the conditions stipulated by EMIR to be covered by the clearing obligation,
- Third country entities that would be subject to it if they were established in the EU and either trade with in-scope EU entities or other third country entities where their transactions could have a direct, substantial and foreseeable effect within the EU or it is appropriate to prevent evasion of MiFIR.

At the end of September 2015, ESMA has proposed a draft regulatory technical standard\(^ {105}\) to determine which derivatives will be subject to this trading obligation with a starting point which is those derivatives that are mandated for clearing under EMIR, ESMA has chosen a careful approach and declared only the following sub-classes of OTC derivatives as subject to the trading obligation, to be applied on January 3rd 2018:

- Fixed-to-float interest rate swaps denominated in EUR, USD & GBP
- Index CDS – iTraxx Europe Main and iTraxx Europe Crossover

In a first step, counterparties grouped in category 1 and 2 according to EMIR will have to apply the trading obligation; category 3 and 4 counterparties are scheduled to be included according to the following timetable:

### Date on which the trading obligation will take effect\(^ {106}\)

<table>
<thead>
<tr>
<th>OTC derivatives class</th>
<th>Category of counterparty</th>
<th>Category 1</th>
<th>Category 2</th>
<th>Category 3</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRD (EUR, GBP, USD)</td>
<td>Date of application of the RTS on the TO</td>
<td></td>
<td>Date of application of the RTS on the TO</td>
<td>21 June 2019</td>
<td>21 December 2018</td>
</tr>
<tr>
<td>Credit derivatives</td>
<td>Date of application of the RTS on the TO</td>
<td>Date of application of the RTS on the TO</td>
<td>21 June 2019</td>
<td>09 May 2019</td>
<td></td>
</tr>
</tbody>
</table>

It is worth noting that MiFID II and MiFIR introduce a new category of trading venue, the OTF (article 1 of MiFIR). Alongside regulated markets (RMs) and MTFs, this is a third type of multilateral system in which multiple buying and selling interests can interact in a way that results in contracts. However, unlike RMs and MTFs, an OTF will only relate to bonds, structured finance products, emission allowances or derivatives. Operating an OTF will be

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\(^{102}\) See https://www.emissions-euets.com/internal-electricity-market-glossary/557-financial-counterparty-fc

\(^{103}\) See https://www.emissions-euets.com/emir-european-market-infrastructures-regulation

\(^{104}\) See https://www.emissions-euets.com/internal-electricity-market-glossary/558-non-financial-counterparty-nfc


an investment service, so a person wishing to do so will need to be licensed as an investment firm. The operator of a RM will also be able to operate an OTF.

Lastly, the EC published in November 2016 its legislative text proposal for recovery and resolution plans of financial market infrastructures\footnote{See \url{http://eur-lex.europa.eu/resource.html?uri=cellar:b17255a7-b550-11e6-9e3c-01aa75ed71a1.0001.02/DOC_1&format=PDF}} which is also a key priority for the G-20. The EC proposal sets new rules comparable to the ones adopted in the BRRD (EU Bank Recovery and Resolution Directive) for banking institutions and are broadly based on international standards adopted so far at the international level, both by the FSB (on the resolution part) and CPMI-IOSCO (on the recovery part).

The proposal requires from CCPs to draw up recovery plans which would include measures to overcome any form of financial distress which would exceed their default management resources and other requirements under EMIR. This should include scenarios involving defaults by the members of the CCP as well as the materialization of other risks and losses for the CCP itself, such as fraud or cyberattacks. Recovery plans are to be reviewed by the CCP’s supervisor. CCP supervisors are granted specific powers to intervene in the operations of CCPs where their viability is at risk but before they reach the point of failure. Supervisors could also require the CCP to undertake specific actions (“early intervention”) in its recovery plan or to make changes to its business strategy or legal or operational structure.

Authorities responsible for resolving CCPs (i.e. resolution authorities) are required to prepare resolution plans for how CCPs would be restructured and their critical functions maintained in the unlikely event of their failure. A CCP will be placed in resolution when it is failing or likely to fail, when no private sector alternative can avert failure, and when its failure would jeopardize the public interest and financial stability. Having said this and pending to see the arrival of a tailor made regime adapted for FMIs, FMIs incorporated with banking licenses are readily applying those relevant provisions from the existing recovery and resolution plans for banking institutions already.

Negotiations in the European Parliament and Council should last at least until the end of 2017. Effective entry into force should not happen before 2019 at the earliest. In the meantime further recommendations are expected from the FSB on the resolution part, notably following the latest consultation published in January 2017 (close date on 13 March 2017) and relating to guidance on CCP resolution and resolution planning.

Shadow Banking

The area where new developments have been mostly observed in the EU since the previous ISSA report from a rule-making perspective is Shadow Banking. Following the FSB publication on its first conclusions on the five Shadow Banking streams in October 2011, the European Commission started to work on Shadow Banking in March 2012 with a green paper consultation\footnote{See \url{https://www.google.fr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwiWrPs5yfWAhXHiRoKHX7aALkOFqoqMMA&url=http%3A%2F%2Fec.europa.eu%2Finternal_market%2Fbank%2Fdocs%2Fshadow%2Fgreen-paper_en.pdf&usg=AOvVaw3h0cLz8uecYOS0_3Df_aFI}}. In the end most efforts have been deployed on Money Market Funds (MMFs) and Securities Financing Transactions (SFTs).

**Money Market Funds (MMF) Regulation**

The EC draft regulation on MMFs was published in September 2013. After a long period of negotiations due to the diverging views in particular on MMFs with Constant NAV, a final agreement was reached between the European Parliament and the Council in November 2017.
2016. The final text was published in the Official Journal for final adoption on 30 June 2017.

Key objectives of this new regulation, complementary to the specific MMF product rules provided by AIFMD or UCITS V, are fully aligned with those defined at the international level in terms of financial stability (i.e. preventing risk of contagion potentially transmitted by MMFs to the money markets and their sponsors) and of increasing protection of MMF investors (by reducing the disadvantages for late redeemers in stressed market conditions). These new requirements (as finally adopted) can be summarised as follows:

- There are 3 different types of MMFs: variable Net Asset Value (NAV) MMFs and two categories of Constant NAV MMFs (Public Debt CNAV MMFs which invest 99.5% of their assets in public debt and Low Volatility CNAV MMFs);
- New investment requirements (such as minimum daily and weekly liquidity allocations; diversification rules by issuer, counterparty and asset; prohibition on short selling);
- New risk management requirements (such as self-credit quality assessment; KYC policies and procedures; stress testing and reporting to competent authorities).

At end May 2017, ESMA released a consultation paper containing a number of proposals on the following aspects:

- How to specify liquidity and credit quality requirements applicable to assets received as part of a reverse repurchase agreement and the criteria of the internal processes for credit quality determination for money market instruments;
- How to specify the reporting template which MMF asset managers will have to send to their national competent authorities;
- Guidelines on common reference parameters of the scenarios to be included in the stressed tests.

Entry into force of the MMF Regulation is planned in Q2 2018 for new MMFs and in Q4 2018 for existing funds.

**Securities Financing Transactions (SFT) Regulation**

The EC initial text proposal for a regulation on the reporting and transparency in SFTs was published in January 2014. The final version of the text was approved by both the European Parliament and Council in respectively October and November 2015 and published in the European Official Journal in December 2015. Main requirements can be summarised as follows:

- Transparency of SFTs with reporting requirements to an EU-approved trade repository;
- Disclosure requirements for asset managers of AIFs and UCITS funds: Management companies of UCITS, UCITS investment companies and AIFMs must inform investors of their use of SFTs and other financing structures in their timely reports;
- Transparency on reuse of financial instruments received under a collateral arrangement: These financial instruments used as collateral must be credited to the receiving counterparty’s securities account prior to its reuse by that counterparty.


Following two consultation papers with regards to the reporting obligation to a trade repository, ESMA’s final report was issued on 31 March 2017 for effective entry into force in 2018 (with phase-in implementation by categories of counterparties). Stakeholders are currently reviewing the content of the ESMA report to define how to adapt to these new requirements and what will be the most relevant approach in this respect.

### 2.3.2 Initiatives on Tax Evasion

**AEOI**

As mentioned in the section on international developments, OECD members have agreed on similar rules to FATCA at the end of 2014 with adoption of the Automatic Exchange of Information (AEOI) Standards and introduction of the Common Reporting Standards (CRS). The first initiative came from the US with the adoption of FATCA, with impacts not only on US players but all around the world due to its extra-territorial dimension. Since then, some work has also been conducted at the international level (in the OCDE). The outcome is a global agreement on Automatic Exchange of Information (AEOI) and the introduction of the Common Reporting Standard (CRS).

In line with the global strengthening of measures of tax evasion prevention, these initiatives were implemented at the EU level through several directives:

- The original framework was set by [Council Directive 2011/16/EU](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011L0016) on Administrative Cooperation (DAC) in the field of taxation, which required automatic exchange of information between EU Member States on private savings income. This enabled interest payments made in on EU Member State to residents of other EU Member States to be taxed according to the laws of the state of the taxpayer’s residence. Accordingly, the Directive established all the necessary procedures for better cooperation between tax administrations in the EU: exchanges of information on request, spontaneous exchanges, automatic exchanges, participation in administrative enquiries, simultaneous controls, and notifications to each other of tax decisions. It also provided for the necessary practical tools such as a secure electronic system for information exchange;


2.3.3 EU-Specific Regulation

While the G-20 has been a key driver for the EU regulatory agenda over the last years, EU-specific initiatives have also been engaged with the introduction of EU-centric new rules. Globally these developments have aimed at:

- Increasing investor protection and awareness (through asset protection and enhanced transparency);
- Strengthening governance and compliance rules;
- Ensuring harmonization of the regulatory and supervision framework for categories of players which were not regulated as such at the EU level prior to the financial crisis.

On investor protection, regulation of investment funds has been one of the major developments, with the adoption of the **AIFM Directive (AIFMD)** in July 2011 (with effective entry into force from 1 July 2013) and the revision of the UCITS Directive (**the UCITS V Directive**) in August 2014. The other piece of legislation having a strong focus on investor protection is MiFID2/R where the investor protection provisions as defined in MiFID1 have been extended to a much wider scope of application and tightened in many respects.

*Alternative Investment Fund Managers Directive (AIFMD)*

The introduction of the AIFMD, published in the Official Journal of European Union on 1 July 2011, is a direct consequence of the Madoff case. The overall objective of the AIFMD is establishing a framework and rules to regulate and supervise EU AIFMs (i.e. managers of all non UCITS funds) and the distribution of all alternative investment funds (AIFs) within the EU.

In a nutshell main provisions can be summarized as follows:

- Providing common rules for the **authorization and supervision of AIFMs** (EU or non-EU) that manage or market AIFs in Europe;
- Achieving a single European market for AIFs by providing both a managing and marketing passport;
- Increasing **transparency** of AIFMs towards investors;
- Providing tools for regulators to **monitor systemic risks** (with proper risk management controls and limitation of potential systemic risks) through introduction and new reporting and disclosure constraints;
- Protection of end-investors with the mandatory appointment of a **single depositary** for each AIF and independent for the AIF and its assets.

The introduction of the **AIFMD passport**, as initially planned, is phased-in with three main steps:

- From July 2013: Passports available for EU AIFMs managing or marketing EU AIFs to EU investors;
- From July 2015: Passport available for AIFMs or AIFs in selected third countries (submitted to ESMA advice);
- From mid-2018: Passport available for any AIFM and AIF (EU and non-EU) and possible end of national private placement regimes (NPPRs).

From a post-trade perspective, the major impacts of the AIFMD are the **harmonization of the depositary functions** (i.e. safekeeping of all the AIFs’ assets, oversight duties, and
cash monitoring) and the stricter liability regime for assets held in custody. For these assets, the depositary has a restitution obligation for any loss, with limited exemptions confined largely to losses caused by “external events” beyond the depositary’s reasonable control (as force majeure). The depositary also bears an inverted burden of proof in case of claims from end-investors.

The AIFMD was supplemented by a wide range of level 2 measures covering among others regulatory standards on types of AIFs, reporting and disclosure requirements and sound remuneration policies. Entry into force of the AIFMD started in July 2013. Then the AIFMs had one year to get authorization from national regulators and be compliant with most provisions.

Today there are still two pending issues on which further clarification is expected:

- For the AIFMD passport, ESMA published in September 2016 its opinion on the extension of the passport to 12 non-EU countries (Australia, Bermuda, Canada, Cayman Islands, Guernsey, Hong Kong, Japan, Jersey, Isle of Man, Singapore, Switzerland, and the United States). Final determination is to be made by the European Commission on the effective extension, with approval of the European Parliament and the Council. Due to the delay observed in this extension, there is no guarantee that the initial timeline envisaged for end of the NPPRs will effectively apply.

- On asset protection aspects, consultations have been conducted by ESMA to define clearly what level of segregation should apply all along the custody chain. ESMA published its final opinion in July 2017. In a nutshell no further segregation requirements are recommended by ESMA. At the same time ESMA makes some recommendations on (1) alignment between the AIFMD and UCITS Directive provisions and (2) introduction of new reconciliation requirements along the custody chain. This opinion has been transmitted to the European Commission, the Council and the European Parliament for decision to be made on what amendments could be brought to the existing legislations.

**UCITS V Directive (Undertakings for the Collective Investment of Transferable Securities)**

After the adoption of the AIFM Directive in 2011, the UCITS Directive was revised to be aligned with the AIFMD on the depositary regime, remuneration policies in asset management companies and powers of sanction for regulators.

The UCITS V Directive was published in the European Official Journal in August 2014. After publication of implementing measures in Q1 2016, the Directive entered into force in March 2016 and level 2 measures regarding the depositary function started to apply from October 2016. From a securities services perspective, the main impacts relate to the depositary functions and the new liability regime introduced with the adoption of the text.

**MiFID2/MiFIR**

As a quick reminder, revision of the MiFID 1 results from the following:

- Following the financial crisis, G-20 requirements to move the negotiation of OTC derivatives onto platforms (as described earlier) and to enhance transparency;
- Unintended consequences of MiFID1 on market fragmentation and market liquidity;
- The revision clause included in MiFID1.

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When the previous ISSA report was published in June 2012, the MiFID2/MiFIR package was still in the negotiation phase in both the European Parliament and Council with many outstanding points. Since then both texts were adopted in December 2014 and resulted in the final scope of provisions (from a high level perspective):

The graph below is a summary of main provisions contained in both MiFID2 and MiFIR.

Finally MiFID2/MiFIR will effectively start to apply from 3 January 2018 (after the one year postponement of the initial date) whereas Member States have to transpose MiFID 2 in their national regulatory framework by 3 July 2017.

From a post-trade perspective, the following measures can be judged as most relevant in the context of this report:

- Finally custody does not qualify as an investment service under MiFID2. However safekeeping provisions have been revised with the introduction of new provisions to restrict the potential use of client assets (all along the custody chain) and get their prior consent in case of reuse. Use of TTCAs (Title Transfer Collateral Agreements) is now forbidden for transactions involving retail clients’ assets and needs to be properly documented and justified for transactions with other categories of clients. On cash, new diversification rules have been introduced (with maximum of 20% client funds held with the same bank/MMF in the same group) unless it is disproportionate to impose this kind of constraints.

- There is still some uncertainty on the application of certain rules on custody services, such as transaction reporting requirements for settlement instructions and some categories of corporate actions. Similarly it is still unclear if the product governance regime may apply to the investment fund order execution by custodians (in the case where this function would be considered as “distribution”).

- Costs and charges disclosures requirements will impact custodians as any other financial participants (as they also apply to ancillary services). On this part additional guidelines are expected from ESMA on several key elements (such as level of aggregation, calculation method).
Custodians will also be impacted for the value-added services they offer to their clients in addition to core custody services (e.g. securities lending / repo transactions and FOREX).

At this stage, all implementing measures have been produced with publication in the Official Journal in March 2017. At the same moment ESMA also released 22 Q&A documents for a wide range of provisions that deserved to be clarified. In addition ESMA has been mandated to draft some guidelines on several aspects: Those related to product governance were issued on 6 June 2017. Those on costs and charges disclosures have not yet been produced and should be available in September 2017 at the earliest.

**Target2-Securities (T2S)**

T2S is not a regulation as such but is highly impacting the EU post-trade landscape in liaison with the CSD Regulation. T2S is the Eurosystem initiative to create a single pan-European settlement platform for (i) cross-border and domestic trades, (ii) securities denominated in euros and other currencies and (iii) settlement in central bank money only 119.

After acceptance by all stakeholders and the various testing phases, the migration started in June 2015. In total 23 CSDs from 21 countries have joined (or will join) T2S in 5 migration waves from June 2015 through September 2017, with 4 countries outside the Eurozone (Denmark, Hungary, România and Switzerland).

The migration waves have occurred as follows:

- **June 2015** (with BOGS, Depozitarul Central, Malta SE, SIX SIS ltd and Monte Titoli (migrated on 31 August), representing 15% of volumes,
- **March 2016** (with Interbolsa and NBB), representing 5% of volumes
- **September 2016** (Euroclear ESES in France, Belgium and Netherlands), representing 25% of volumes,
- **March 2017** (Clearstream Banking Frankfurt, CSD Slovakia, CSD Slovenia, Lux CSD, OeKB, Keler), representing 40% of volumes,
- **September 2017** (with CSD Estonia, CSD Latvia, CSD Lituania, Euroclear Finland, Iberclear) representing 15% of volumes.

In parallel, significant work led by the T2S Advisory Group120 and supported by the Harmonisation Steering Group (HSG) has been conducted for the adoption of common standards to be complied with in all T2S markets. Post-trade harmonization is considered as a central objective of T2S and consequently 24 common standards were agreed on with different levels of priority.121 The main ones are about T2S messages, settlement discipline regime, settlement cycles, CSD account structures, legal harmonization and corporate actions market standards.

A summary table can be found in the ECB’s Seventh T2S Harmonisation Progress Report (reproduced below)122

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120 In March 2017, the AMI SeCo replaced the T2S Advisory Group
### Status dashboard of the T2S harmonisation activities (as at 20/12/2016)

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<th>Monitor</th>
<th>Compliance</th>
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</thead>
<tbody>
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<tr>
<td>T2S ISO 20022 messages</td>
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<td>T2S matching fields</td>
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<tr>
<td>Interaction for registration</td>
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<td>G</td>
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<td>Interaction for tax info</td>
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<td>G</td>
<td>B</td>
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<td><strong>Schedule of settlement day</strong></td>
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<tr>
<td><strong>T2S corporate actions standards</strong></td>
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<td>R</td>
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<tr>
<td>Settlement finality I (moment of entry)</td>
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<tr>
<td>Settlement finality II (irrevocability of transfer order)</td>
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<tr>
<td>Settlement finality III (irrevocability of transfers)</td>
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<tr>
<td><strong>Legal harmonisation</strong></td>
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<td>Outsourcing IT services</td>
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<tr>
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<tr>
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<td>G</td>
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<td><strong>CDS account structures</strong></td>
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<td>Restriction of omnibus accounts</td>
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<tr>
<td><strong>T2S account numbering</strong></td>
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<tr>
<td>Securities accounts numbering</td>
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<tr>
<td>Dedicated cash accounts numbering</td>
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</table>

<table>
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<th>Activities – Priority 2</th>
<th>Definition</th>
<th>Monitor</th>
<th>Compliance</th>
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<td><strong>Legal harmonisation</strong></td>
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<tr>
<td>Location of securities account/conflicts of law</td>
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<td><strong>Corporate actions market standards</strong></td>
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<td>CA market (CAJWG) standards</td>
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<td><strong>Place of issuance</strong></td>
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<tr>
<td>Withholding tax procedures</td>
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<td>Securities amount data</td>
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<td>Portfolio transfer</td>
<td>Y</td>
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</table>
### Colour methodology in the different harmonisation processes

<table>
<thead>
<tr>
<th>Colour</th>
<th>Description</th>
</tr>
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</table>
| **Compliance**<br>The market has achieved full compliance with the harmonisation standard.**<br>For technical standards (e.g. T2S ISO messages), this means that the T2S market is already operating according to the standard.**<br>For regulatory/legal standards (e.g. T2S settlement finality rules), this means that the relevant regulation/legislation is already in place. | **Green**<br>The relevant stakeholder bodies (in or outside T2S) have defined and agreed/endorsed the standards for the harmonisation activity.**<br>The monitoring actors (in or outside T2S) have defined and implemented a framework for monitoring and reporting progress on the T2S markets’ compliance with the harmonisation standard. The T2S markets report regularly to the responsible stakeholder bodies.**<br>There are changes still pending (technical, regulatory or legal) before the T2S market can achieve full compliance with the harmonisation standard, but no obstacles have been identified to achieving full compliance by the deadline.**<br>The market has established a clear/detailed plan to implement the harmonisation standard and has publicly announced deadlines for full implementation. | **Yellow**<br>Open issues remain concerning the definition and agreement of the standards for the harmonisation activity by the relevant stakeholder bodies (in or outside T2S). However, stakeholders have agreed a roadmap and an approach to resolving pending issues in order to achieve agreement on the standard.**<br>The monitoring actors (in or outside T2S) have defined and implemented a framework for monitoring and reporting progress on the T2S markets’ compliance with the harmonisation standard. The T2S markets report to the monitoring bodies on an irregular basis.**<br>There are changes still pending (technical, regulatory or legal) before the T2S market can achieve full compliance with the given harmonisation standard, but obstacles have been identified which may threaten achievement of full compliance by the deadline.**<br>The T2S market has issued a statement that it will implement the standard, but has not committed to concrete and publicly announced dates for implementation. | **Red**<br>Relevant stakeholder bodies (in or outside T2S) have not reached an agreement on the definition of the standard and stakeholders have not agreed a roadmap or an approach to achieving agreement on the standard. Stakeholders have not agreed a formal plan to achieve compliance with the standards.**<br>The monitoring stakeholders have not defined and/or not implemented a framework for monitoring and reporting progress on the T2S markets’ compliance with the harmonisation standard.**<br>The T2S market has not provided any information on its level of compliance with the standard.**<br>The T2S market has decided not to (fully) comply with the standard.**<br>There are changes still pending (technical, regulatory or legal) before the T2S market can achieve full compliance with the harmonisation standard and obstacles have been identified that have stopped the implementation plan of the market and/or will prevent its full implementation by the deadline. | **Process not started yet**

**Further monitoring of the T2S market is required.**
Today common standards are already defined for 17 activities (as indicated in the latest T2S Harmonisation Progress report published on 31 January 2017). Steady progress has been made in the compliance with these standards thanks to the great implication of both the public sector and the industry in this area. Adoption of the CSD Regulation has also been a major milestone for adoption of these standards. Today main difficulties persist in the areas of corporate actions, legal barriers and the withholding tax procedures. The work currently conducted by the European Post Trade Forum (see below the paragraph on the CMU) should help in defining the best solutions for removal of these barriers in the future. For sure there will be substantial industry implications of T2S. In terms of benefits, T2S should allow reduction of cross-border settlement costs and optimization of collateral and liquidity needs. At the same time custodians and CSDs must adapt their settlement and asset servicing processes in this new model where competition will also intensify across the CSD community, but also between CSDs and custodians for asset servicing.

**Capital Market Union**

In parallel the EC launched a new project at the end of 2014 which aims at strengthening capital markets and investments in Europe: The Capital Market Union (CMU) project. It is an integral part of the Investment Plan for Europe, the so-called “Juncker Plan”.

Following a Green Paper consultation in February 2015, the EC published its Action Plan in September 2015. The main action points may be summarized as follows:

- Financing for innovation, start-ups and non-listed companies;
- Making it easier for companies to enter and raise capital on public markets;
- Investing for the long term, infrastructure and sustainable investment;
- Fostering retail and institutional investment;
- Leveraging banking capacity to support the wider economy;
- Facilitating cross-border investing.

In this context strong attention is put on access to financial markets for all types of investors (including SMEs and retail) and effective cross-border investment. In the Action Plan, the EC identified some quick wins for which immediate actions were required. The main ones were the introduction of a “Simple, Transparent and Standardised” Securitization (to relaunch securitization in the EU) and modernization of the Prospectus Directive (to reduce the burden for issuance by SMEs).

The EC also launched a **call for evidence about the cumulative impact of the financial reform** in the aftermath of the financial crisis. This consultation was a major step as it was the first occasion to have a transversal view on all sets of new rules adopted over the last 10 years. The EC published the conclusions of feedbacks received to the consultation in September 2016 and identified three main streams: Impediments to the financing of the real economy, proportionality and compliance burden.

In January 2017, the EC launched a **public consultation on a CMU mid-term review** to collect feedback on CMU achievements since the project launch and on the potential need to review the CMU objective. On 8 June 2017, the EC published a new communication on the main conclusions resulting from the responses received to the CMU mid-term con-

sultation and on the next priorities for the CMU.\textsuperscript{127} On actions identified in the initial Action Plan, the EC intends to focus in particular on a pan-European personal pension product (PEPP), an EU-framework on covered bonds, as well as on securities law. The communication also sets out 9 new priority actions such as strengthening the powers of ESMA, reviewing the prudential treatment of investment firms, exploring measures to support secondary markets for non-performing loans and assessing the case for an EU licensing and passporting framework for FinTech activities. The CMU initiative has particularly gained importance in the context of Brexit as the EU aims to strengthen and further integrate capital markets, following the departure of Europe’s largest financial center.\textsuperscript{128}

Post-trade is also part of the issues that the EC is looking at in the CMU context with the objectives to remove all post-trade barriers impeding cross-border investments across the EU. In this respect the EC launched in January 2016 the \textbf{European Post-Trade Forum (EPTF)} with representatives from the industry and experts in post-trade activities.

Actually EPTF has revisited the Giovannini barriers as identified in the two reports issued in 2001 and 2003 to assess which ones have been removed and for persisting ones, what actions should be undertaken in the future. The EPTF has also assessed if new barriers emerged following the financial crisis. At the end the EPTF will publish a report addressing “EPTF barriers” with a description of these barriers, their consequences on cross-border investments and the potential way forward to remove them. The final EPTF report was published on 23 August 2017.\textsuperscript{129} alongside with an EC public consultation on the content of the report (close date on 15 November 2015).

\textit{Conclusion}

A major challenge for European policy-makers in the coming months will be to reach the right balance between economic growth objectives on ones side and continuing to regulate on financial stability and resilience of the financial markets.

\textsuperscript{127} See \url{https://ec.europa.eu/info/sites/info/files/communication-cmu-mid-term-review-june2017_en.pdf}


\textsuperscript{129} See \url{https://ec.europa.eu/info/consultations/finance-2017-post-trade_en}
2.4 Developments in Latin America

Latin America is very diverse in terms of regulations. There is no common entity which could impose new laws or regulations, particularly in the Securities Market, neither is there a common supervisory authority or market regulator. Latin America has several regional organizations, free-trade agreements between some countries and other international agreements. Countries are members of various international organizations.

The "Alianza del Pacifico" comprised of Chile, Colombia, Mexico and Peru, strives to build in a participatory and consensual way an area of close integration. The intention is to move progressively towards the free movement of goods, services, resources and people. One particular goal is to make an effort to harmonize legislation in the securities market.

A summary of the developments in Latin America and some countries in particular is shown in this Chapter. Following the financial crisis, the Latin American region has been participating in a general review of the law on various fronts. At this point, the following are the themes addressed by the regulatory and supervisory entities in the Latin American region:

<table>
<thead>
<tr>
<th>Regional Topics for Discussion</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress tests</td>
<td>30%</td>
</tr>
<tr>
<td>Implementation of standardized approaches</td>
<td>25%</td>
</tr>
<tr>
<td>Supervision Intensity for Systematically Important Banks (SIBs)</td>
<td>20%</td>
</tr>
<tr>
<td>Pillar 2 implementation framework</td>
<td>15%</td>
</tr>
<tr>
<td>Regulatory Scope of Consolidation</td>
<td>10%</td>
</tr>
<tr>
<td>Quality and sufficiency of information for effective oversight</td>
<td>10%</td>
</tr>
<tr>
<td>Corporate governance and internal control</td>
<td>7%</td>
</tr>
<tr>
<td>Interaction between micro- and macro-prudential supervision</td>
<td>5%</td>
</tr>
<tr>
<td>Regulatory treatment of sovereign exposure</td>
<td>5%</td>
</tr>
<tr>
<td>Development of early intervention policies</td>
<td>5%</td>
</tr>
<tr>
<td>Incorporation of new technologies in the financial sector (Fintech)</td>
<td>3%</td>
</tr>
<tr>
<td>Supervision revision and process evaluation</td>
<td>3%</td>
</tr>
<tr>
<td>Implementation of accounting reforms</td>
<td>3%</td>
</tr>
<tr>
<td>Market behaviour and transparency</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: ASBA, Result of survey on major impact events in the region, 2015

The internationalization of the local banking industry and the opening of the economies confirm the need to implement international standards and best practices.

Nevertheless, the regulatory implementation has taken place in a different way and has been adjusted to the realities of the various jurisdictions, in some cases with even stricter parameters than those defined by the international standard.
2.4.1 CPMI-IOSCO Principles
One of the fronts local markets have targeted in particular is the review of the CPMI-IOSCO principles:

A. A self-assessment was performed on the level of observance of these 24 new principles.
B. Work has been undertaken in order to incorporate them to local legislation.
C. ACSDA, the Americas’ Central Securities Depositories Association\textsuperscript{130} has contributed to this process and is now relying on funding provided by the Inter-American Development Bank (IDB) to perform work in the region intended to offer advice on the level of compliance, implementation and ultimately incorporation of these principles as standards.
D. MILA is also included in the Governmental initiative called Alianza del Pacifico\textsuperscript{131}, which is a regional integration comprised by Chile, Colombia, Mexico and Peru.
E. Some countries as for example Chile, have implemented the obligation to report according to the Common Standard Reporting OECD initiative.

2.4.2 Regional Efforts Under Way
Over the next decade many of the efforts by the authorities and the financial industry in the region will focus on the following regulatory fronts:

- Capital and liquidity;
- Valuation of Risk;
- Quality of information and reports;
- Mechanisms for resolution of conflicts;
- Regulation on asset laundering and terrorism funding;
- Better Corporate Governance regulations.

Capital and Liquidity
With a long term view, more and better capital as well as more liquidity will be required, addressing these issues.

- Capital buffers (countercyclical, conservation, systemic);
- TLAC (Total Loss Absorbing Capacity);
- ICAAP (Internal Capital Adequacy Assessment Process);
- Gearing Ratios;
- LCR short term liquidity ratio;
- Net Stable Funding Ratio.

\textsuperscript{130} See www.acsda.org
\textsuperscript{131} See https://alianzapacifico.net/
Valuation of Risk
Review of internal models and standards, incorporating parameters that make them more sensitive to risk and less discrentional. Addressing risk categories like credit, counterparty, market, operational, interest rate in the banking book with respect to:

- Provisions: impairment recognized under expected losses (IFRS 9)
- Stress testing

Quality of Information and Reports
Better quality of the information from databases to risk reports, necessitating Information Governance regarding:

- Proper aggregation of information for risk management;
- Improvement of quality and timeliness of risk reports;
- Data architecture and technology infrastructure of the information;
- Governance and definition of sound practices for information management.

Resolution mechanisms
Greater responsibility of shareholders in the event of bankruptcy calling for mechanisms that minimize the use of public resources in financial entity resolution.

Regulation on Asset Laundering and Terrorism Funding
In August 2017, the Basel Institute on Governance issued its 7th Basel AML Index. It covers 146 countries and measures the risk of money laundering and terrorist financing of countries based on publicly available sources. A total of 14 indicators dealing with AML/CFT regulations, corruptions, financial standards, political disclosure and rule of law are aggregated into one overall risk score. The risk categories have been statistically established between a low risk rating of 3.04 and the highest measured risk at 8.60. The average risk rating was 6.15. The table below summarizes the rankings for the Latin American countries:
<table>
<thead>
<tr>
<th>Country</th>
<th>Overall Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paraguay</td>
<td>7.53</td>
</tr>
<tr>
<td>Haití</td>
<td>7.50</td>
</tr>
<tr>
<td>Bolivia</td>
<td>7.17</td>
</tr>
<tr>
<td>Panamá</td>
<td>7.01</td>
</tr>
<tr>
<td>Trinidad and Tobago*</td>
<td>6.80</td>
</tr>
<tr>
<td>Argentina</td>
<td>6.69</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>6.69</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>6.64</td>
</tr>
<tr>
<td>Jamaica *</td>
<td>6.60</td>
</tr>
<tr>
<td>Venezuela</td>
<td>6.53</td>
</tr>
<tr>
<td>Ecuador</td>
<td>6.37</td>
</tr>
<tr>
<td>Guyana</td>
<td>6.24</td>
</tr>
<tr>
<td>Brazil</td>
<td>6.20</td>
</tr>
<tr>
<td>Guatemala *</td>
<td>6.17</td>
</tr>
<tr>
<td>Grenada</td>
<td>6.04</td>
</tr>
<tr>
<td>Honduras *</td>
<td>5.97</td>
</tr>
<tr>
<td>St. Vincent and the Grenadines</td>
<td>5.96</td>
</tr>
<tr>
<td>Costa Rica *</td>
<td>5.93</td>
</tr>
<tr>
<td>México</td>
<td>5.75</td>
</tr>
<tr>
<td>St. Lucia</td>
<td>5.72</td>
</tr>
<tr>
<td>El Salvador</td>
<td>5.48</td>
</tr>
<tr>
<td>Perú</td>
<td>5.25</td>
</tr>
<tr>
<td>Uruguay</td>
<td>5.16</td>
</tr>
<tr>
<td>Dominica</td>
<td>5.12</td>
</tr>
<tr>
<td>Chile</td>
<td>4.94</td>
</tr>
<tr>
<td>Colombia</td>
<td>4.57</td>
</tr>
</tbody>
</table>
**Better Corporate Governance Regulations**

Several countries in Latin America including Colombia, Argentina, Brazil and Peru publicly committed to initiate an accession process to be part of the Organization for Economic Cooperation and Development (OECD). Due to these factors, Latam governments are working on strengthening their corporate governance regimes, with a clear focus on anti-corruption and capital markets’ development. The latest developments on the subject are the initiatives for corporate governance harmonization (based on the MILA case with the interest of Brazil to participate; and regulatory initiatives specially within AP - MILA to facilitate local pension funds to invest within the region); new corporate governance regulations for economic groups (such as the new Colombian law for financial conglomerates); and the task force led by OECD and CAF, with the support of B3 (Brazilian Stock Exchange) to develop capital markets within the region.

**2.4.3 Compliance with the Basel III Framework**

The following is the state of compliance of Basel III in the various countries that comprise the region:

![Graph showing compliance with Basel III framework](image)

Source: ASBA, 2015 Regulatory and convergence challenges. Gradual convergence. September

**2.4.4 Overview of Local Regulatory Adoptions**

Given that each market has been independent in their implementation of international recommendations and principles, the following is the diverse status of the regulation for the some countries:
### Chile

<table>
<thead>
<tr>
<th>Law/Decree</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law N° 20.345(1)</td>
<td>Clearing and settlement of financial instruments</td>
</tr>
<tr>
<td></td>
<td>Bill to establish a new system of guarantees on securities held in Securities Depository accounts</td>
</tr>
<tr>
<td>Law 20.448</td>
<td>New reform about liquidity and innovation and integration in the Securities Market.</td>
</tr>
<tr>
<td>Law 20.880</td>
<td>Probit in Public Service and Conflict of Interest Prevention.</td>
</tr>
<tr>
<td>Law 19.913</td>
<td>Laundering of assets</td>
</tr>
<tr>
<td>Ley N°21.000</td>
<td>Established new Supervision entity for the securities market: Commission for the Mercado Financiero</td>
</tr>
</tbody>
</table>

### Colombia

<table>
<thead>
<tr>
<th>Decree</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D 2953/10</td>
<td>Regime for the Investment of technical reserves of insurance companies and capitalization companies</td>
</tr>
<tr>
<td>D 2954/10</td>
<td>Sufficient equity for Insurance companies</td>
</tr>
<tr>
<td>D 2973/13</td>
<td>Regime for the Investment of technical reserves of insurance companies and capitalization companies</td>
</tr>
<tr>
<td>D 1895/12</td>
<td>Sufficient equity for pension fund administrators and insurance companies that administer social security resources through independent equities</td>
</tr>
<tr>
<td>D 2878/13</td>
<td>Modifies Decree 2555 of 2010 Report or repo, simultaneous and securities temporary transfer operations, and other provisions are dictated.</td>
</tr>
<tr>
<td>D 1242/13</td>
<td>Rules for the administration and management of Collective Investment Funds.</td>
</tr>
<tr>
<td>D 1068/14</td>
<td>FIC leveraged transaction, which are cleared and settled in a Central Counterparty clearing house.</td>
</tr>
</tbody>
</table>

### Argentina

<table>
<thead>
<tr>
<th>Law</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law 26.830</td>
<td>“Voluntary externalization on foreign currency holding in the country and abroad” (Capital Laundering).</td>
</tr>
<tr>
<td>Law 26.831</td>
<td>Capital Markets</td>
</tr>
<tr>
<td>Law 26.994</td>
<td>By means of which the new national Civil and Commercial Code is modified, including rules relating to negotiable instruments.</td>
</tr>
<tr>
<td>Resolution 229/2011</td>
<td>Of the Financial Information Unit (UIF) on prevention standards on asset laundering and terrorism funding in terms of the capital market</td>
</tr>
<tr>
<td>General Resolution n° 622/2013</td>
<td>Of the National Securities Committee (CNV) approving the new text (CNV N.T. 2013 Standards) of the entity</td>
</tr>
</tbody>
</table>
Peru

They have issued various rules applicable to entities supervised by the Superintendence of Banking, Insurance and PFAs (SBS) and by the Superintendence of Securities and Insurance (SVS), as detailed below:

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Law N° 30052 (2013)</td>
<td>Reporting Operations Law</td>
</tr>
<tr>
<td>Supreme Decree N° 00033-2016-E</td>
<td>Determine entities obligated to value their investments with prices from pricing vendors</td>
</tr>
<tr>
<td>Resolution SMV N° 00005-2012</td>
<td>Regulation against Market Abuse – Rules on Improper Use of Privileged Information and Market Manipulation</td>
</tr>
<tr>
<td>Resolution SMV N° 00027-2012</td>
<td>Approving the Regulation on Securities Clearing Systems</td>
</tr>
<tr>
<td>Resolution SMV N° 00007-2013</td>
<td>Modifying the Standards for the Prevention of Asset Laundering and Terrorism Funding, approved by Resolution CONASEV N° 033-2011-EF/94.01.1</td>
</tr>
<tr>
<td>Resolution SMV N° 00019-2015</td>
<td>Regulation on Indirect Property, Association and Economic Groups (to become effective on 01.01.2017)</td>
</tr>
<tr>
<td>Resolution SBS N° 9075-2012</td>
<td>Approving Regulation for Liquidity Risk Management</td>
</tr>
<tr>
<td>Resolution SBS N° 2660-2015</td>
<td>Regulation on asset laundering and terrorism funding risk management</td>
</tr>
<tr>
<td>Resolution SBS N° 7932-2015</td>
<td>Approving Regulation on Country Risk Management (effective as of 07.01.16)</td>
</tr>
<tr>
<td>Resolution SBS N° 5780-2015</td>
<td>Approving new Special Rules on Association and Economic Group</td>
</tr>
<tr>
<td>Resolution SBS N° 1041-2016</td>
<td>Approve the regulation of investments of insurance companies</td>
</tr>
<tr>
<td>Resolution SBS N° 975-2016</td>
<td>Regulation of subordinated debt applicable to the companies of the financial system</td>
</tr>
</tbody>
</table>

Bolivia

| Law N 170 of 2011                     | Law of financing of terrorism and separatism                                                                                                                              |
| Law N 262 of 2012                    | Regime freezing of funds and other assets of individuals linked to terrorist acts and terrorist financing                                                               |
| Law N° 393, 05 August 2013           | Law of Financial Services.                                                                                                                                                |
| Supreme Decree N° 2264 of 2015       | Authorizes the Productive Development Bank - joint-stock company - BDP SAM, to implement and manage a registration system of non-conventional guarantees for providing services of registration and assessment of non-conventional financial system guarantees, according to regulations issued by the authority supervision of the financial system - ASFI. |
| Supreme Decree N° 1841 of 2013       | Regulates the provision of operations and financial services and public bank for public administration at all levels of government as well as the functions of supervision, inspection and surveillance in the market Law No. 331. |
| Resolution ASFI 838 of 2015          | Regulation for the management of information security.                                                                                                                     |
### Uruguay

<table>
<thead>
<tr>
<th>Law 18.494 June 2009</th>
<th>Prevention and Control of asset laundering and Terrorism Funding.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decree 355/2010</td>
<td>Which it includes new subjects as required to report &quot;unusual&quot; or &quot;suspicious&quot; operations.</td>
</tr>
<tr>
<td>Law 18.627 and Regulatory Decree 322/2011</td>
<td>Of the Securities Market. Provides better disclosure for the securities market and protection to investors. Imposes obligations related to compliance with Corporate Governance practices.</td>
</tr>
<tr>
<td>Law 18.573</td>
<td>On clearing, settlement system for payments and securities.</td>
</tr>
</tbody>
</table>
3. What Is Coming Next?

There is no doubt that objectives pursued by public authorities over the last years will still prevail in the coming years. Financial stability, resilience of financial markets and monitoring of systemic risks will remain high on the agenda and will be strong drivers for adoption of new reforms.

Even if current discussions in the Basel Committee on the revision of the credit risk methodology are still outstanding, with uncertainty on when a final agreement will be reached, they will eventually be adopted with emergence of a new paradigm for the determination of risk weighted assets and use of internal models. Similarly the current framework for CCP supervision will keep evolving and further transparency may be requested on initial margin models and stress testing scenarios. More efforts will also be produced to improve the quality of data reporting and provide the public authorities with relevant information on assessment of both individual and aggregated data.

This being said it is worth noting that public authorities have recently extended their scope of review by taking into consideration new emerging developments in the financial sphere. On the one hand it is not possible anymore to ignore some major geo-political events that will affect for sure the regulatory framework applicable to the financial markets. On the other hand the authorities have started looking at some global developments which are not limited to the financial sector but that will be key drivers in re-shaping the delivery of financial services in the near future. In this respect we have selected the ones we see as most relevant in the context of this Report and which refer to (1) Fintech and (2) Sustainable Finance. For both of them a new policy framework will have to be considered but some opportunities for securities services providers may also be envisaged.

3.1 Latest Geo-Political Events

Over the last year, developments experienced in the political sphere have been totally unexpected and have introduced huge uncertainty. Both the vote in favor of Brexit and the Presidential election in the US were not seen as credible outcomes and totally opposed to most forecasts. One of the main consequences in both cases is the wide uncertainty resulting from these developments, in particular regarding how the regulatory framework for financial services could change in the future.

3.1.1 Brexit

In addition to its political and trade implications, Brexit will have far-reaching consequences on the financial sector. The UK is indeed the largest financial center in the EU operating as a hub for other European countries and concentrating a large part of the wholesale financial services used by a majority of investors. It also provides today the most liquid and deepest currency, equity and derivatives markets in Europe.

The opportunities offered by the use of passporting across Europe, coupled with the citizens’ right framework, have played a key role in reinforcing the world leading position acquired by the UK marketplace since the 19th century. They have allowed many financial service providers to concentrate their European activities in the UK while benefiting from access to the 28 EU Member States financial markets.

With Brexit the UK will leave the single market and become a so-called third country. Existing cross-border arrangements will potentially disappear as a hard post-Brexit scenario seems to be more and more likely. This change will affect the activities of UK markets but also those of all other 27 EU Member States due to the long established interdependencies between both. Two major questions have arisen following the vote:
On one hand, will it still be possible for UK-based entities to continue serving EU 27-based clients? On the other hand, will EU 27-based financial companies be allowed to maintain their activities in the UK in the same conditions, in particular through the use of branches established in the UK?

If the end of passporting rights seems to be taken for granted, great uncertainty prevails on the outcome of the negotiations between the UK and the EU 27 Member States. It is possible that there may be no agreement at the end of the two year period with a cliff-edge effect. In this context the UK-based financial industry, but also most global financial players, are pushing for preservation of the current integration of UK and EU financial markets. The introduction of a broad mutual recognition of the equivalence of EU and UK capital market regulations and supervisory cooperation are highly supported. The provision of a sufficiently long transition period is presented as a minimum pre-requisite to minimize potential disruptions.

From a post-trade perspective, several issues need to be properly addressed to anticipate the implications of Brexit. As for any other activities, questions about maintenance of staff located in the UK and continuation of the branch model will be crucial. More specifically securities services will have to investigate the following aspects:

- Access to financial market infrastructures (for both UK-based and EU 27-domiciled entities);
- Licensing of activities which require local authorization from competent authorities;
- Clients’ plans to re-domicile some activities to preserve their ability to distribute financial products across the EU 27 Member States;
- Potential re-domiciliation of some Euro-denominated clearing activities due to their systemic dimension.

At this stage it is still quite challenging to define what should be the right strategies as nobody knows the final outcomes of negotiations. The outcome of the June 2017 UK general elections adds further uncertainty on what Brexit scenario will be negotiated. The change of the current UK regulatory framework, but also effective revision of existing EU legislations are also burning questions that will have to be addressed in due time. It already appears that on-going negotiations in the EU are substantially influenced by the Brexit vote, in particular when rules relate to third countries and the equivalence concept.

Lastly it is worth noting that the European Commission has restated on several occasions its strong will to continue the Capital Market Union project despite the vote for Brexit. In fact, the UK due to depart from the single market is seen by the European Commission as a good reason to strengthen EU 27 capital markets. This will also have an influence on the current EU supervisory framework, especially regarding the way it applies to third country entities which provide financial services to EU investors, both in the EU and outside the EU.

3.1.2 Presidential Election in the US

The November 2016 US election has also brought some uncertainty about the future of the Dodd Frank Act (DFA) and associated regulations. During his campaign, the President-elect candidate promised to “dismantle” Dodd Franck Act. Many Republicans in Congress share a similar desire to change major portions of the Dodd-Frank Act. In practice, this has proved to be difficult.

Full repeal of Dodd-Frank appears unlikely given the need to achieve some level of bi-partisan support to do so.
In June, the House of Representatives passed the Financial Choice Act (“CHOICE”; H.R. 10)\textsuperscript{132} on a party-line vote with only one Republican voting against the bill. CHOICE is largely the work of the Financial Services Committee Chairman Jeb Hensarling (R-TX). The bill seeks to repeal some of the most significant policies passed in Dodd-Frank. CHOICE proposes many changes but here are some of the highlights:

- Repeals Basel III capital liquidity rules and the heightened prudential standards of DFA section 165, in exchange for a Leverage Ratio of 10% (on a voluntary basis);
- Eliminates Dodd-Frank’s Orderly Liquidation Authority, replacing it with new bankruptcy code provisions.
- Eliminates Federal Reserve’s authority to provide certain systemically important entities access to deposit accounts and/or access to the discount window.
- Eliminates the Financial Stability Oversight Council’s (FSOC) ability to designate SIFIs and SIFMUs. The FSOC would be restricted to monitoring the markets, sharing the information, identifying potential risks and reporting to Congress with recommendations;
- Changes the Federal Reserve’s Living Wills and Stress Test programs such as to reduce the regulatory burden on the largest banks;
- Repeals the Volcker Rule;
- Eliminates the Office of Financial Research (OFR) which in particular plays a key role in collecting data on repos and securities lending. The objective is to eliminate duplication between the OFR’s activities and those of other agencies;
- Eliminates risk retention rules for asset-backed securities besides residential mortgages.

The Senate has not indicated an interest in considering CHOICE.

On 3 February 2017, the US President issued an Executive Order\textsuperscript{133} instructing the US Treasury to review all financial regulation and issue reports analyzing their consistency with President Trump’s core regulatory principles. The first US Treasury report was published on 12 June\textsuperscript{134} and focused on banking regulations. Treasury’s report addressed Capital and Liquidity, Living Wills, Foreign Banking Organizations, Improving the Volcker Rule, Leveraged Lending, Community Financial Institutions, Improving the Regulatory Engagement Model, Providing Credit to Fund Consumer and Commercial Needs to Drive Economic Growth, Consumer Financial Protection Bureau, Residential Mortgage Lending and Small Business Lending.

Some of the main take-aways were:

- Around 78% of the proposals do not require legislative changes, but “only” regulatory action. Many of the recommended regulatory changes fall under the responsibility of the FED Vice-Chair for Supervision and commissioner appointments at regulatory agencies. Some of the proposed changes could materialize as early as 2018.


For recommendations that require legislative action it will be more complicated, impacted by the relative priority of financial reform against Health Care, Tax and Border Security, the relatively small number of Congressional legislative days remaining in 2017 and bi-partisan support.

While the report adopts a US domestic focus, many recommendations may also have an impact on international regulation and global level playing field. The report recommends delaying implementation of FRTB (Fundamental Review of the Trading Book) and NSFR (Net Stable Funding Ratio), a crucial point in the current European debate about their transposition. The report also recommends continued involvement by the US in international setting bodies, such as the Basel Committee, and encourages greater regulatory consistency across jurisdiction. The report continues to reflect doubts on internal models and supports the finalization of Basel III including an output floor.

Other reports will follow on market regulation, asset management, insurance, non-banks, and Fintech. Those additional reports are expected to be published starting September 2017.

In conclusion it is now taken for granted that the US regulatory framework in the financial sector will evolve in the future. Next questions are about the extent of this reshuffle, the concrete way to carry on these revisions and on the way it will influence international regulation and implications for non-US players. Many questions have already arisen on the potential competitive disadvantage which could result from these changes for non-US financial participants.

3.2. Fintech

While technological innovation is not new in the financial sphere, what has changed over the most recent years is the increase of investment and the pace of innovation in this area. "Fintech" describes technology-enabled innovation in financial services and includes among other things social networks, artificial intelligence, machine learning, mobile applications, distributed ledger technology (DLT), cloud computing and big data analytics.

From a post-trade perspective, most attention has been on Blockchain/DLT, which have emerged as the most potential disrupting innovation in securities services activities. Many things have been said on the opportunity to overhaul existing intermediaries and market financial infrastructures from the securities services value chain with the Blockchain technology, enabling a direct relationship between the issuer of a security and the final investors. Over the last months, the disrupting dimension of Blockchain has been clearly put into perspective in view of the numerous challenges to be overcome by all stakeholders. There is a general agreement that the Blockchain technology is still in its infancy and that it is premature to envisage swift transformation of the legacy system. However the momentum is still there, with a more targeted approach and more limited scope of application at this stage.

Until recently, public authorities and regulators have adopted a pure observation approach with the objective to better understand how these technologies function, their main features in terms of opportunities, risks and challenges, and identification of the main stakeholders active in this new ecosystem.

In this respect a number of consultations have been conducted at both international and local level to collect input on these various aspects. These consultations have more recently inserted new types of questions relating to the need of potentially regulating the use of Fintech and what should be the most relevant policy framework. It is also worth noting that questions around cyber-criminality and security are often associated with
the Fintech topic in order to clarify if the use of Fintechs may expand this type of risks or on the contrary act as an effective deterrent to cyber-attacks.

**At the international level**, the FSB has adopted a risk-focused approach regarding Fintechs. The first FSB positioning on Fintech occurred in February 2016 when the FSB added Fintech to the list of its worries. Then the FSB started to examine whether the growing Fintech sector presents any risk to the financial system and its potential financial stability implications. Another FSB objective is to assess the extent to which these risks are addressed by existing regulatory frameworks. As a result the FSB issued on 27 June 2017 a new report on “Financial Stability Implications for Fintechs”.

The report identifies ten areas that merit authorities’ attention with need of international collaboration for three of them: Managing operational risk from third-party service providers, mitigating systemic risks and monitoring macrofinancial risks that could emerge as Fintech activities increase. The report also presents the framework developed by the FSB to define the scope of Fintech activities to be covered. Through various case studies of Fintech activities, the report identifies the potential opportunities (e.g. greater efficiency and transparency, decentralization and increased intermediation by non-financial entities) and risks (e.g. increased connectedness and correlation risk) from Fintechs while noting that understanding the materiality of these issues remains challenging due to the lack of available information. The FSB will continue to monitor and discuss the evolution of the potential financial stability implications of Fintech developments.

IOSCO released a research report on Financial Technology in February 2017. The report highlights the growing interactions between Fintech and securities markets across a number of critical business areas, including financial platforms, robo-advisory services, innovations in bond trading and applications of DLTs. The report refers to the various approaches adopted by regulators (such as creating sandboxes or opening labs and accelerators) and notes that regulation in this area is today largely conducted within national or sub-national borders. This local approach may create challenges regarding cross-border supervision and enforcement and may result in potential regulatory arbitrage as most Fintech firms operate globally. As a conclusion IOSCO recommends further coordination between national regulators through discussions via the international stage.

**At regional and local level**, regulators have also been very active in the Fintech area. Globally they have actively promoted such technology. As a matter of illustration, several consultations have been conducted across the EU on Fintech, from a global perspective or with a more specific angle. Most recently the EC conducted a consultation on Fintech between March and June 2017, with the objective to collect feedback on new technologies’ impact on the European financial services sector, but also on how to further develop the Commission’s policy approach towards technological innovation in financial services. The Commission also sought input on the three core principles retained so far and which are technologic neutrality, proportionality and integrity.

**ESMA** launched a first consultation on investment using virtual currency or DLT in April 2015. ESMA did not take a supervisory nor a rule-making stance in this consultation. It aimed indeed at understanding developments in the market, potential benefits or risks for investors, market integrity or financial stability, and supporting the functioning of the EU single market. ESMA launched a second more specific consultation in June 2016 on the DLT applied to securities markets. In addition to questions about potential benefits, risks and challenges raised by the use of DLTs, this paper provided a stock-take, with a particular

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138 See https://www.esma.europa.eu/file/18727/download?token=j_lKec2m
focus on post-trading activities, of the key EU regulations which would be applicable to DLT. The regulations identified and discussed included EMIR, the Securities Finality Directive, and the CSDR. The final objective was to form an opinion on whether a specific regulatory response to the use of this technology in securities markets is needed.

Following responses received to this consultation, ESMA released a report summarizing its main conclusions\(^{139}\). ESMA believes that DLT could bring a number of benefits to securities markets, in particular more efficient post-trade processes, enhanced reporting and data management capabilities and reduced costs. At the same time, ESMA believes that a number of challenges need to be addressed before these benefits may materialize, such as including interoperability and the use of common standards, access to central bank money, governance and privacy issues and scalability. ESMA also notes that DLT is still at an early stage and that it is premature to assess the exact nature and level of risks that will emerge with the use of DLT. Similarly it is still unclear to what extent identified challenges will be overcome and thus will disrupt the legacy system. Finally, ESMA sees as unlikely that DLT will eliminate the need for financial market infrastructures, such as CSDs and CCPs, at least in the short and medium-term. However, it does realise that DLT may render some processes redundant or change the role of certain intermediaries through time. ESMA will continue to monitor market developments around DLT to assess whether a regulatory response may be needed.

The European Central Bank (ECB) recently led a study\(^{140}\) to analyse the benefits and risks of blockchain technology and consider its possible integration in its market infrastructure. The final report was published in May 2017 and concluded that DLT does not meet the ECB’s requirements in terms of safety and efficiency. The ECB considers that the technology is not mature enough to be integrated into its infrastructure as it is constantly evolving. Nevertheless, experts recognise that DLT contains several advantages and could notably help reduce back office costs, shorten settlement cycles and enable automatic updates of records. The ECB will keep monitoring DLT developments, notably to explore how it could be used in the T2S environment.

The European Commission is also active in the Fintech area and has published a public consultation on the matter.\(^{141}\) The consultation was issued on 23 March 2017. The scope was quite large as all types of Fintechs were covered (including DLT). The main topics addressed were:

- Fostering access to financial services for consumers and businesses;
- Bringing down operational costs and increasing efficiency for the industry;
- Making the single market more competitive by lowering barriers to entry;
- Balancing greater data sharing and transparency with data security and protection needs.

In the UK, the FCA has actively promoted the “regulatory sandbox” concept since its launch in May 2015. The regulatory sandbox’s main purpose is to enable businesses to test innovative products, services, business models and delivery mechanisms in the real market, with real consumers. It is open to both authorised and unauthorised firms and provides them with three main elements:

- Reduced time-to-market at potentially lower cost;
- Appropriate consumer protection safeguards built in to new products and services;
- Better access to finance.

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141 See https://ec.europa.eu/info/sites/info/files/2017-fintech-consultation-document_en_0.pdf
The sandbox remains a supervised space, including safeguards for financial consumers. At the same time the regulatory environment is customized to each participant, with for instance waivers or modifications of applicable rules. “No enforcement action letters” can also be issued for the duration of the sandbox test.

So far three “cohorts” have been pushed by the FCA for the sandbox application. Each cohort is open to a diverse range of sectors, locations and sizes. Once selected, participants to the sandbox test their innovation for limited duration with a limited number of customers.

More recently, consultations on DLT have been launched locally, both in France (by the French Treasury) and in the UK (by the FCA) and is indicative of continued regulatory interest in understanding opportunities and risks creating by the use of DLT. Some concrete questions have also emerged on the need to adapt local regulatory and legal frameworks to ensure proper monitoring of the technology and its stakeholders, and also on measures which could favor the deployment of DLT.

In the US, policymakers continue to show increasing interest in emerging innovation and are exploring a range of Fintech.

The Federal Reserve System is closely following emerging innovation and in 2016, staff issued a white paper, “Distributed ledger technology in payments, clearing, and settlement”\(^{142}\) examining how the technology might be used, and to identify the opportunities and challenges facing its implementation.

The SEC hosted a Fintech forum in November 2016, and has formed a DLT Working Group to build expertise, identify emerging risk areas, and coordinate efforts internally. The SEC recently issued a report that virtual coins or tokens may be securities and subject to U.S. federal securities laws. Such offers and sales using distributed ledger or blockchain technology are known as Initial Coin Offerings or Token Sales.

In May 2017, the CFTC announced the creation of LabCFTC, a hub for the agency’s Fintech engagement. The lab aims to promote responsible Fintech innovation to improve the quality, resiliency, and competitiveness of markets; and to accelerate CFTC engagement with Fintech and Regtech solutions.

Since 2015, the Office of the Comptroller of the Currency has implemented a framework supporting responsible innovation, held a public forum and published guiding principles. It also established an Office of Innovation and is considering granting special purpose national bank charters to fintech companies.

U.S. Congressional interest remains high as lawmakers continue to explore potential benefits and challenges offered by Fintech. In 2016, House members launched the Congressional Blockchain Caucus to advance public policy towards blockchain-based technologies and digital currencies. Legislation was introduced during the previous Congress that would mandate innovation offices dedicated to Fintech in a number of federal agencies.

At Asian level, policy makers are certainly aware of the challenge and have launched a range of regulatory initiatives throughout Asia Pacific aimed at facilitating and monitoring innovations, and promoting their jurisdictions as Fintech hubs. Many Asian regulators have announced plans to implement ‘regulatory sandboxes’ where innovators can test their services under real market conditions. Some regulators are incorporating advisory groups

and panels for Fintech innovations, Fintech bridges to other jurisdictions, cloud computing guidelines, payment councils and peer to peer lending, amongst the many more initiatives.

Amongst Fintech innovation, Asia Pacific is working very rapidly harnessing the power of innovative technology to address regulation and compliance issues in the financial industry. Regulatory Technology (Regtech) is gaining popularity in the area of Know Your Clients (KYC) compliance, automated regulatory reporting and communications monitoring.

On the industry side, the number of initiatives and reports about Blockchain / DLT is also impressive. Several consortia have been set up in order to share views and experiences from their members and generate new ideas. For example, the R3 consortium was created in September 2015 and now includes more than 70 members with representatives from financial and industrial (Intel) actors. Several streams have been identified and launched to experiment proofs of concepts (POCs) and common standards across the industry around its CORDA protocol. At this stage, despite the challenges encountered on a number of structural issues (such as governance, privacy or irreversibility) and the departure of some initial participants, R3 workstreams may lead to the adoption of an industry standard blockchain protocol built around Ethereum, a decentralized platform for applications.

Many other consortia have been created at the local level and/or for specific types of activities. As an illustration, the Fundchain initiative was launched in Luxembourg to investigate how the Blockchain technology could be leveraged to improve the various components of the investment funds processing. In France the Caisse des Dépôts et Consignations (CDC) also developed its own Blockchain initiative with participation of major French financial players. The Labchain consortium, since its creation in May 2016, has seen an increasing number of participants (now more than 30 financial institutions have joined the Labchain) and has launched several POCs in diverse business activities such as Know Your Customer (KYC), non-cash collateral management on securities lending transactions, and issuance and trading of minibonds on a Blockchain platform.

Individual firms have also conducted their own experimentations on the Blockchain over the recent years. They all seek out new paths to innovation with two objectives: The first one is to explore how use of Blockchain can lead to further efficiency and reduced costs, in particular in case of long time established manual processes. The second one is client focused with inclusion of the Blockchain technology in the services provided to clients. As clients’ behavior and expectations have changed, securities services providers are looking for flexible and resilient responses to this new environment.

When taking a step back on the numerous initiatives launched over the last two years on the Blockchain technology, following conclusions can be made:

- The financial industry is still at an early stage of the Blockchain process. While market participants can benefit from great Blockchain opportunities, a wide range of limits is to be properly tackled before envisaging a real disruption of the legacy infrastructure (e.g. technological abilities, the security limit, privacy issues). As long as these issues remain unaddressed, the use of the Blockchain technology will be confined to narrow scopes of application and primarily in the private sphere (i.e. internally or with a limited number of permissioned participants).

- Blockchain cannot be envisaged in isolation. Real benefits of the Blockchain technology can best be identified when considering its use in combination with other innovative technologies. Probably most important, innovation will come from the ability to combine the Blockchain with other innovative solutions such as big data analytics, machine learning and artificial intelligence.

- A harmonized regulatory framework will be necessary as technology evolves and innovation is adopted globally. However, more time is needed to test the
technology and understand the new types of risks it will generate. Local initiatives play a fundamental role in this experimentation phase and contribute to innovation deployment. When considering actual policy actions, core principles prevail such as ensuring level playing field between the different stakeholders, maintaining proportionality in the rules adopted and preservation of consumer protection.

3.3 Sustainable Finance

In this area, interest of public authorities is even more recent. At this stage most efforts have been produced at the international level with establishment of the Task Force on Climate-related Financial Disclosures (TCFD) in December 2015 and adoption of the UN 2030 Agenda and Sustainable Development Goals in 2015. Most recently the European Commission has also set up of a High-Level Experts Group on Sustainable Finance in September 2016, in the context of the CMU project. All initiatives have also been strongly driven by the Paris Climate Agreement signed in December 2015. Some local initiatives also deserve attention as they could serve as a benchmark to define more global rules in the future.

These developments are of interest for securities services providers as a large part of recommendations adopted so far refer to new disclosure requirements. Securities Services providers are best placed to assist their clients in the compliance with this type of new obligations and could have a real-added value in developments of adequate solutions. The TCFD was established by the FSB in December 2015 to develop recommendations for more efficient effective climate-related disclosures that:

- Could “promote more informed investment, credit, and insurance underwriting decisions”, and
- In turn “would enable stakeholders to understand better the concentrations of carbon-related assets in the financial system’s exposure to climate-related risks”.

The mandate of the TCFD has been defined as follows: Provide a clear, efficient, and voluntary disclosure framework that improves the ease of both producing and using climate-related financial disclosures. More concretely the TCFD has established on one hand a list of climate-related risks and on the other hand the climate-related opportunities. The final outcome is the release of four widely-adoptable recommendations that are applicable to organisations across sectors and jurisdictions and structured around the following thematic areas:

- Governance;
- Strategy;
- Risk Management;
- Metrics and Targets.

These four key themes are supported by 11 specific recommended disclosures which can be summarised as follows:

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144 See http://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_english_.pdf
Some general guidance to assist organisations in implementing the recommended disclosures have also been developed. Supplemental guidance for certain sectors (with a distinction between financial and non-financial sectors) have also been provided. **A strong focus is made on the reliance on scenario analysis tools** for better understanding the strategic implications of climate-related risks and opportunities. The Task Force also identified certain areas where further work can contribute to the evolution of climate-related financial disclosures (such as relationship with other reporting initiatives, data quality and financial impact and scenario analysis).
A first draft report was released by the TCFD in December 2016 with a 60-day public consultation period. The final report was released on 29 June 2017.147

At the European level, the European Commission announced in its communication on CMU of September 2016148 that it would establish a High-Level Expert Group on Sustainable Finance149 (HLEG) to advice on developing a comprehensive EU strategy on sustainable finance. The HLEG, established in December 2016, was mandated to provide recommendations to the Commission on how to:

- Better integrate sustainability considerations in the EU's financial policy framework;
- Protect the stability of the financial system from risks related to the environment and its stability;
- Mobilise capital, notably from private resources, to finance sustainable investments and growth.

The HLEG published an interim report in July 2017150 and will deliver its final report by the end of 2017. The interim report maps out the challenges and opportunities that the EU faces in developing a sustainable finance policy agenda, identifying possible areas of reform in financial policy. It also presents a first set of early recommendations to the Commission and focuses on the following areas:

- A classification system for sustainable assets;
- A European standard and label for green bonds;
- Fiduciary duty that encompasses sustainability;
- Better disclosure from financial institutions and companies on how sustainability is factored into decision-making;
- A 'sustainability test' for relevant EU financial legislation.

The Commission will now start exploring these early recommendations as of now.

Other policy areas have been identified as requiring further analysis, such as integrating sustainability considerations in ratings, improved transparency requirements for listed companies as well as increasing the level of sustainable investments through stable long-term policy frameworks and a strong pipeline of sustainable projects.

At the local level, France was the first country to introduce mandatory climate change-related reporting for institutional investors, with adoption of Article 173 of France’s law on “energy transition for green growth” in August 2015. An implementing decree was also adopted to set out the requirements in greater detail. Effective since the beginning of January, the decree applies to a wide range of investors, including asset managers, insurance companies, Caisse des Dépôts et Consignations and pension and social security funds. They are all being required to report not only on how they integrate Environmental, Social and Governance (ESG) factors in general into their investment policies – and, where applicable, risk management – but also specifically on how climate change considerations are incorporated.

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Article 173 is the first national regulation built around 2°C as the maximum tolerable global temperature increase. Other local initiatives have been announced since then. The Swedish financial supervisor and national authorities in the UK, Netherlands and Finland, have also begun to discuss how to best manage the systemic financial risks resulting from climate change and wider sustainability concerns. In the UK, the Prudential Regulatory Authority (PRA) published a report on the impact of climate change on the UK insurance sector\(^\text{151}\) in September 2015 and the Bank of England has been very active on research on climate change.

Interestingly seven civil society groups (E3G, WWF, CDSB, CDP, ShareAction, ClientEarth, and Finance Watch) published in May 2017 a briefing paper entitled “The Role of ESMA in Sustainable Finance”\(^\text{152}\) which sets out six actions that the ESMA should undertake, as part of its mandate to protect investors and avert financial instability, to facilitate the integration and management of climate and wider sustainability risks in financial markets. The actions proposed are based on ESMA’s existing powers and on areas of its existing mandate. The briefing mainly focuses on ESMA but also touches upon the duties and roles of the other European Supervisory Authorities (ESAs).

Key actions are described as follows in the briefing paper:

- Initiate a review to assess oversight by competent authorities on reporting of climate and wider sustainability risk disclosures in issuer annual reports;
- Include climate and wider sustainability information in the draft Regulatory Technical Standards on electronic reporting;
- Include requirements for reporting on climate and wider sustainability risks in the guidelines on risk factors in prospectuses;
- Promote supervisory convergence for common regulatory and supervisory standards on climate and wider sustainability risk disclosures;
- Issue guidelines to CRAs to incorporate climate and sustainability risks into CRAs' methodologies;
- Assess risks posed by climate and wider sustainability factors in securities market to include in quarterly Risk Dashboard and bi-annual Trend Risk and Vulnerability report.

On the industry side some initiatives have also been launched over the last months and demonstrate the willingness of financial players to play a key role in this area, through active collaboration between the public and private sectors. As an illustration, the French Paris Europlace think tank launched the Green and Sustainable Finance initiative in May 2016. In its report published in January 2017, Paris Europlace sets out 15 recommendations around three main themes: Promote the quality of products and expertise, strengthen public-private synergies and accelerate the spread of European and international influence. In addition to further disclosure requirements, the report also promotes the emergence of standards and best practices across the financial sector.

From a more individual institution perspective, some players have developed new tools to assist their clients in Environmental, Social and Governance (ESG) integration and ESG risk management. At this stage, it appears that most attention from investors has been on the Environmental pillar rather than on the Governance and Social factors (mainly because most initiatives so far on the public side have related to the transition to a low-carbon economy as described earlier in this report). As a result most efforts have been

\(^{151}\) See http://www.bankofengland.co.uk/pra/Documents/supervision/activities/pradefra0915.pdf

\(^{152}\) See http://www.finance-watch.org/ifile/Publications/sheets/Briefing%20paper%20-%20ESMA%27s%20role%20in%20sustainable%20finance%20160517.pdf
deployed so far on the integration of environmental considerations in the portfolio selection and investment process.

Different approaches have been adopted on ESG integration. One is to offer an alternative to simply excluding certain companies or sectors from portfolios through exclusionary screening. In that case, the ESG integration is the incorporation of ESG factors into financial analysis and investment decision-making in order to enhance returns and mitigate risks. Upstream service providers, such as custodians and market data vendors, can also play a valuable supporting role by providing tools and metrics. Stress-testing and reporting tools will be particularly crucial in enabling firms to monitor ESG-related risks, and to identify, stay informed about and report on the impact of their investments. Solutions to fill these needs are already emerging, and more will follow. Investors have globally strong expectations which go far beyond data collection. The main concern is not so much about quantity, but rather about quality, consistency and relevance. As a result main challenges are about analytics and costs which are viewed as tomorrow's most significant barriers.
4. Conclusions

The main purpose of this report was to provide professionals in securities services and other financial activities with a detailed overview of main regulatory developments in post-trade over the last years.

This report is in continuity of the previous one published in 2012, in the very direct context of the 2008 financial crisis. First it goes through the progress made in measures adopted in the aftermath of the financial crisis by financial institutions. Main take-aways from this analysis can be summarised as follows:

- The priorities of international bodies are still the same. They have continued their work to ensure financial stability and resilience of the financial system, with strong focus on prevention and monitoring of systemic risk, enhanced transparency and adequate safeguards to face extreme situations. When they have included new topics in their scope of review (on request of the G-20), the same angle has been adopted and should continue to prevail in the coming years.

- In parallel to the production of new recommendations, international institutions have also conducted regular assessment on the previously adopted measures. These exercises have evidenced two main facts. First the level of implementation is not the same from one region / jurisdiction to another. Secondly international standards are not sufficient or detailed enough to allow full consistency across jurisdictions. In some cases new guidance has been issued to facilitate consistent implementation and then reduce diverging interpretations.

- Since 2012 international institutions have extended their mandate to two new major topics. On one side the Shadow Banking system has been identified by the G-20 as a new priority. As a consequence the FSB has released new recommendations in this area around five different streams. In parallel recovery and resolution plans for non-banking institutions have also emerged as a new priority, with focus on financial market infrastructures (FMIs), and more precisely CCPs.

The analysis of developments by regions is the opportunity to have a clear view on the way international standards have been concretely transposed for effective application by market participants. This detailed review shows that strong similarities can be observed from one region to another while real differences also prevail:

- In all regions the G-20 agenda has been the main driver for new regulatory measures. Structuring legislative initiatives have been adopted over the past years and final rules are known in most cases. Main challenge now is about the effective implementation of new measures.

- At the same time the final outcome is not always the same from one country to another. As mentioned above the interpretation of international standards may diverge and result in quite significantly different implementing measures, for instance in terms of scope of application or reporting obligations.

- The timing for adoption and entry into force is not the same from one region to another.

- On top of the G-20 agenda specific local initiatives have also been conducted by regulators. In some cases they have extra-territorial effects which can significantly impact market participants all over the world. In other circumstances the consistency of these local specific initiatives with international objectives may be a challenge for regulators who need to reach the right balance between various objectives.
Lastly it is quite interesting to see that regulators have also embraced totally new areas of interest and/or concern by taking into consideration new developments that will for sure impact the financial sphere in the medium and long term:

- After going through a quite long period of observation (which is a quite new behaviour in the regulatory community), public authorities have started to consult on regulatory adaptations that could result from new technological developments and innovation. There are still open questions on the most relevant approach to ensure at the same time the full benefits resulting from Fintechs while preserving the right level of security for end-users. In any case it seems quite obvious that new sets of rules (or guidelines at a minimum) should be published in the near future.

- Similarly sustainable finance is also now on the top of the agenda of most regulators. Expert groups and task forces dedicated to the analysis of its financial dimension and to the initiatives that could be launched to improve the effective contribution of financial participants in the development of a comprehensive strategy for sustainable finance have already published some recommendations. Other ones are to be issued in the near future and should result in the emergence of a new monitoring framework to address climate-change related risks. Enhanced transparency should be the major tool used at least in a preliminary phase.

On top of these targeted initiatives, regulators have no other choice than to take into consideration major geo-political developments which occurred over the last months. It is obvious that they may have strong impact on existing regulatory frameworks, even if wide uncertainty still persists on the possible outcome of current debates and negotiations.

From an industry perspective, it is essential that a true and constructive dialogue takes place between the public and the private sector on these new areas of developments. As for any other measures it is key to adapt some rules which are consistent with the effective functioning of the underlying activities and which do not impede the financing of the real economy. At the same time protection of end-investors needs to be preserved at all costs, i.e. level of safety should not be undermined for the sake of innovation.

In any case securities services providers will keep adapting to the new regulatory framework by integrating new requirements in their existing processes and ensuring their compliance with existing and additional measures. As described in more details in Report 2 (to be published in 1st half of 2018), many efforts have been engaged to set up new solutions which address the expectations of their clients who are themselves faced with quite challenging adaptation needs resulting from new rules. An analogous behaviour from securities services providers will keep prevailing in the context of Fintech and sustainable finance. Some solutions have already emerged and there is no doubt that innovative ones to assist end clients will keep being offered in the near future.
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Ted Serafini, DTCC
Urs Staehli, ISSA
Wladyslaw Unrug, BNPPSS
## 6. List of Abbreviations

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACSDA</td>
<td>Americas’ Central Securities Depositories Association</td>
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<td>ADR</td>
<td>American Depositary Receipt</td>
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<td>AEOI</td>
<td>Automatic Exchange of Information</td>
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<td>AIF</td>
<td>Alternative Investment Fund</td>
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<td>AIFMD</td>
<td>Alternative Investment Fund Managers Directive</td>
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<tr>
<td>AML/CFT</td>
<td>Anti-Money Laundering/Counter-Terrorist Financing</td>
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<tr>
<td>APRA</td>
<td>Australian Prudential Regulation Authority</td>
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<td>ARFP</td>
<td>Asia Region Fund Passport</td>
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<td>ASEAN</td>
<td>Association of South East Asian Nations</td>
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<td>ASEAN CIS</td>
<td>ASEAN Collective Investment Scheme</td>
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<td>ASIC</td>
<td>Australian Securities and Investments Commission</td>
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<td>AuC</td>
<td>Assets under Custody</td>
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<td>B3</td>
<td>Brazilian Stock Exchange</td>
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<td>BCBS</td>
<td>Basel Committee on Banking Supervision</td>
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<td>BHC</td>
<td>Bank Holding Companies</td>
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<td>BIS</td>
<td>Bank for International Settlements</td>
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<td>CAA</td>
<td>Competent Authority Agreement</td>
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<td>CAF</td>
<td>Corporation for Andean Development</td>
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<td>CAT</td>
<td>Consolidated Audit Trail</td>
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<tr>
<td>CCP</td>
<td>Central Counterparty Clearing House</td>
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<td>CDC</td>
<td>Caisse des Dépôts et Consignations</td>
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<tr>
<td>CDS</td>
<td>Credit Default Swaps</td>
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<tr>
<td>CFTC</td>
<td>US Commodity Futures Trading Commission</td>
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<tr>
<td>CHOICE</td>
<td>The US Financial CHOICE Act</td>
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<tr>
<td>CMU</td>
<td>Capital Markets Union</td>
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<tr>
<td>CNAV</td>
<td>Constant Net Asset Value</td>
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<tr>
<td>CPMI</td>
<td>Committee on Payments and Market Infrastructures (BIS)</td>
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<tr>
<td>CPSS</td>
<td>Committee on Payment and Settlement Systems (BIS)</td>
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<tr>
<td>CRA</td>
<td>Credit Rating Authority</td>
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<tr>
<td>CRS</td>
<td>Common Reporting Standard</td>
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<td>CSD</td>
<td>Central Securities Depository</td>
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<tr>
<td>CSDR</td>
<td>Regulation on Settlement and Central Securities Depositories (EU 909/2014)</td>
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<tr>
<td>DCO</td>
<td>Derivatives Clearing Organizations</td>
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<tr>
<td>DFA</td>
<td>Dodd-Frank Act</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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