Operating Committee

Working Group 1: Regulatory Trends and Initiatives Affecting Custodians, Clearers and (I)CSDs; Impacts and Implications

June 2012
Abstract
This document reviews recent regulatory changes in various geographic regions that affect the securities industry, and it analyses their impact on custodians, clearers and financial market infrastructures in terms of additional cost, changed risk responsibilities and the creation of new opportunities.

Addressees of this Document
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.

Acknowledgements
This report is the result of efforts by a team of experts drawn from ISSA Operating Committee members and other ISSA participating member firms. All participants and third parties supplied valuable market information. The names of working group participants are listed in Annex A. ISSA Executive Board wishes to thank all supporters for their personal contributions as well as their firms for having enabled their participation.

Disclaimer
Neither ISSA nor the authors of this document warrant the accuracy or completeness of the information or analysis contained herein. Readers are encouraged to develop their own base of information and understanding.
# Table of Contents

## Part I  Main Document

1. **Executive Summary** ........................................................................................................... 1
   1.1 Impact of Regulatory Changes and Market Developments on the Securities Industry ........................................ 1
   1.2 Impact of Regulatory Changes that Apply Directly to Custodians, Clearers and FMIs ........................................ 2
   1.3 Scope and Objectives of the Report - Regulatory Trends and Impacts ......................................................... 6
   1.4 Report Chapters ......................................................................................................................... 7

2. **Regulatory Trends** ........................................................................................................... 8
   2.1 The Trend in the United States ...................................................................................................... 9
   2.2 The Trend in the EU .................................................................................................................. 11
   2.3 The Trend in Asia ..................................................................................................................... 14

3. **Analysis of Regulatory Impact on the Environment** ......................................................... 17
   3.1 Impacts of MiFID 2 .................................................................................................................. 17
   3.2 Impacts of EMIR ....................................................................................................................... 18
   3.3 Impacts of AIFMD .................................................................................................................... 19
   3.4 Impacts of UCITS V ................................................................................................................ 19
   3.5 Impacts of Financial Transactions Tax .................................................................................... 20
   3.6 Impacts of CSD Regulation ..................................................................................................... 21

4. **Analysis of Regulatory Impact of EU Initiatives, Global Initiatives, and FATCA on Financial Intermediaries** ................................................................. 22
   4.1 MiFID 2 .................................................................................................................................... 22
   4.2 AIFMD ...................................................................................................................................... 26
   4.3 UCITS V ................................................................................................................................... 28
   4.4 CSD Legislation/Regulation (CSDR) ....................................................................................... 28
   4.5 T2S .......................................................................................................................................... 29
   4.6 Financial Transaction Tax ........................................................................................................ 30
   4.7 International Rules or Initiatives Affecting Financial Intermediaries ............................................... 31

5. **Analysis of Regulatory Impact of EU/US Initiatives, Global Initiatives, and FACTA on Market Infrastructures** ........................................................................ 40
   5.1 Regulatory Reforms Related to OTC Derivatives ....................................................................... 40
   5.2 Global Risk Principles for FMIs .................................................................................................. 41
   5.3 Regulatory Reforms in the EU Applicable to CSDs ..................................................................... 44
   5.4 Target2 Securities (T2S) ............................................................................................................ 46
   5.5 Foreign Account Tax Compliance Act (FATCA) ....................................................................... 47

6. **Concluding Notes and Open Questions** ............................................................................. 49
Table of Contents
(continued)

Part II Annexes

Annex A Working Group 1 Members ..........................................................51
Annex B Regulatory Initiatives in the Americas Beyond the US .......................52
Annex C Foreign Account Tax Compliance Act (FATCA) ...............................55
1. Executive Summary

1.1 Impact of Regulatory Changes and Market Developments on the Securities Industry

The focus of this report is the impact of regulatory changes that directly affect custodians and clearers (intermediaries) and financial market infrastructure entities (FMIs). However, as an introduction to these direct impacts, we provide below an abbreviated summary of how recent regulatory changes and market developments will affect or have affected the entire securities industry. Below are three of the more significant changes that impact the overall environment.

**Basel 3**
Basel 3 will have a profound effect on the banking industry. Once fully implemented, it will significantly increase the capital that banks must maintain against risk assets. Banks will be forced to both raise their capital base via new offerings of securities that qualify as capital (equity, contingent convertible (COCO) bonds in Europe etc.) and/or reduce risk weighted assets by such means as balance sheet reduction and a shift to assets that attract a lower risk capital weighting. Banks will also be required to comply with strict liquidity ratios, forcing them to hold some highly liquid assets. Clearing activity will require more capital as exposure towards CCPs will have to be taken into account. On the other hand, custody remains a low capital requirement activity and also provides access to liquidity sources through client cash accounts, for example. Custody activity is therefore gaining attraction within banking groups.

**Move of OTC to central counterparty clearing**
Dodd Frank in the US and EMIR in Europe require the central clearing of “standard” OTC derivatives and this will likely reduce the profitability of such transactions as increased transparency takes hold. Operating until now in a more opaque OTC market, OTC derivatives have been a significant contributor to bank profitability. The new regulations will also create the need for additional high quality collateral to come from whoever enters such trades (institutions as well as banks) and given the immense size of the OTC derivatives market ($647 trillion in notional value as of December 2011 according to BIS) industry sources estimate this need will exceed USD 1 trillion. This squeeze on high quality collateral will likely increase its cost which in turn may negatively impact trade volumes.

**Recent market developments**
The economic and market environment has changed in other ways as a result of the recent financial crisis. Central banks, notably the US Federal Reserve and the European Central Bank, have pursued a low interest rate policy in the hope of stimulating growth. The low interest rate environment has not only created a thirst for yield but forced pension plans to recognize large funding gaps as a result of using lower discount rates to calculate their future obligations. Institutional investors will not only demand higher absolute returns on their assets but will also pressure their vendors, including custodians, to reduce their costs. Further, many institutions have re-assessed their activity in securities lending and have either withdrawn from custodian programs or changed their cash re-investment guidelines, thereby reducing the spread opportunity for both themselves and their custodian agent lenders. Add in the effects of the recent decline in trading volumes and the greater focus on foreign exchange spreads that affect profitability, and it is apparent that securities intermediaries face a strong headwind. The full impact of Basel 3, the shift to central clearing for OTC derivative trades, and many other changes detailed in this report are yet to be fully implemented and felt. Banks are now typically operating at a 7% to 10% return on equity, and they will be forced to further reduce costs, exit less profitable businesses, and decline to service
customers that create a high capital requirement. Global custodians and clearers are either stand-alone banks or are part of larger banking groups, and the cost and capital pressures will also be applied to them. They, in turn, will demand greater value and cost reductions from their vendors, including FMIs, which are not traditionally used to those pressures.

At the same time, regulators at international levels are pushing towards greater use of infrastructures to limit counterparty risk and increase transparency. However, to manage and limit systemic risk, they are looking to introduce a systematic Tiered Market Organization where banks and financial intermediaries should continue to provide a risk absorbing buffer. Regulators are also focusing on increased investor protection by increasing transparency on financial products and increasing responsibility of intermediaries. Clearers and custodians are reinforced in their role in the value chain in different ways. They may face some challenges on their traditional sources of revenues but those market developments also provide new opportunities for them to develop new services or deepen existing services to support their clients’ challenges.

1.2 Impact of Regulatory Changes that Apply Directly to Custodians, Clearers and Financial Market Infrastructures (FMIs)

This Report reviews in some detail the impact of regulatory changes that directly affect “intermediaries” (custodians and clearers) and FMIs. Since the financial crisis, regulatory focus has been on reducing systemic risk and increasing transparency. Other issues on the pre-crisis agenda, such as cost reduction, market efficiency and the maintenance of a level playing field, remain of interest but have taken a back seat.

Regulatory changes will add costs and impose new responsibilities/risks while also creating opportunities for intermediaries and FMIs. The overall impact for any entity will depend on how they are positioned, how well they are able to streamline their services and reduce costs, how able they are to recoup any net expense increases via extra client revenues, and how willing and able they are to take advantage of opportunities.

The impact of Basel 3 on intermediaries will vary. Some firms that have limited risk asset appetites are already in compliance with the new standard. In parallel, some FMIs may seek to increase capital, notably those required by CPSS-IOSCO to maintain sufficient equity to continue on a going concern basis in the event losses arise (a minimum requirement that equity equal at least six months operating expense). The earlier CPSS-IOSCO draft principles sought industry input on a minimum capital equal to six, nine or twelve months of operating expenses. Given that earlier potential, the minimum requirement in the recently-issued final principles could well have been more onerous.

As detailed in this report, numerous regulatory changes will add to costs for both intermediaries and FMIs and will require intermediaries to absorb increased risk. Some of the more extensive changes include:

(I) FATCA
Both intermediaries and FMIs are covered by the US Foreign Account Tax Compliance Act (FATCA), and it is estimated that large banking organizations will spend many tens of millions of dollars to comply given the operational complexity and extensive scope of the regulation.

(II) Risk Principles for FMIs
CPSS-IOSCO have recently issued key principles for FMIs applicable in particular to CCPs and CSDs. These require those FMIs in particular to strengthen the risk
management framework for infrastructures. FMIs will need to strengthen their operational risk model, ensure sufficient liquidity resources including in times of stress, and maintain financial resources to cope with credit risk and potential participants’ defaults, including in extreme but plausible market conditions.

(III) T2S and T+2
In Europe the introduction of T2S, the European settlement system operated by the Eurosystem, with a target live date of 2015, will require CSDs to incur costs as they decouple/outsource their settlement engines and interface with T2S.

(IV) AIFMD
As more extensively reviewed in chapter 3 of the WG2 report, the European Alternative Investment Fund Managers Directive (AIFMD) imposes responsibility on custodians for a wide variety of types of “losses” and creates a remedial duty to promptly replace, or provide compensatory funds to promptly replace, “lost” assets held in custody regardless of the nature of the loss, the type of custody asset involved or, in some cases, the delay inherent in retrieval of the asset. The possibility for the custodian to escape liability is limited and restricted, and in effect an “inverted” burden of proof is imposed -- i.e. the custodian must prove it did everything right. The implicit cost of this change in liability standards is substantial and since it is unlikely that affordable insurance can cover the risk, custodians may curtail their services to riskier funds and markets and will seek to pass through the extra capital risk and other costs to funds and their investors. The outcome at this date is unclear but many hedge funds and private equity funds may seek out less problematic/risky investment destinations.

At the same time the regulatory changes create opportunities for both intermediaries and FMIs. In some cases, the opportunity for FMIs may lead the FMIs to compete with some of their direct participants. Some of the more substantial opportunities include:

(I) Outsourced services
As detailed earlier, regulations and market developments will cause all actors to reduce costs and many will be more willing to outsource functions that provide little or no proprietary advantage. The provision of middle office services for the “sell side” may be undertaken by commercial providers or in some cases by utilities (FMIs). Such services should be attractive to second-tier brokers/banks lacking scale and efficient operating systems -- and perhaps to some larger firms as well. Similarly, buy-side firms may accelerate an earlier trend to outsource middle office services to custodians. Compliance with some regulation such as FATCA or mandatory CCP clearing for OTC derivatives creates significant operational complexity that buy side clients may have difficulty coping with. In addition, the existing and more mature outsourcing service for correspondent banks and regional brokers will continue. The earlier “lift out” experience of custodians with middle office in-sourcing has shown that catering to unique requirements does not pay and any venture into this area must be on an efficient standardized platform with little or no deviation from the standard model.

(II) Collateral optimization and transformation
The transition of OTC derivatives to clearing will create a huge demand for high quality collateral that can be pledged to CCPs. Intermediaries may extend new services to meet this need by providing enhanced collateral optimization services and collateral transformation where an over-collateralized, lower quality basket of securities owned by a party seeking CCP-eligible collateral is exchanged, with or without a guarantee, for higher quality collateral from a lender. FMIs could also
position themselves on those types of services by providing a platform for collateral exchanges and optimization, whereas intermediaries could provide those services either as agent or using their own balance sheet.

(III) Pan-European CSD access and competition
The launch of T2S in 2015 will represent a substantial loss of settlement revenue for CSDs. Further, relative to the size of European financial assets there are simply too many CSDs, and the new European CSD regulation, which allows CSDs to provide services across the EU, will open up the space to competition. Survivors will seek out technology alliances or outright mergers to survive and to bolster revenues and will likely offer their services across Europe by opening up accounts with other CSDs. This service may compete with custodians for certain clients with more plain “vanilla” requirements. There are even rumors that some custodians in turn may seek to open up CSD subsidiaries to gain direct access to T2S.

(IV) Access to infrastructures
Regulators are pushing the market to achieve greater use of infrastructure and are even requesting the creation of infrastructures where they don’t exist today. This is the case for the OTC derivatives market, and some discussions have already started for the repos and securities lending markets. These initiatives are clear opportunities for existing FMIs to expand the reach of their expertise. These are also opportunities for intermediaries to offer access to those infrastructures, since regulators are for systemic reasons promoting a tiered-market organization that would limit direct access to FMIs to only highly-capitalized intermediaries.

(V) Trade repositories
The regulatory demand for transparency in OTC derivatives has resulted in the creation of five global repositories. The use of a single global repository per asset class will reduce user costs in updating such entities, but where regional and national repositories also exist it is hoped that common data fields and communication protocols will prevail so that users can update just one repository, with that entity in turn updating other repositories as required.

(VI) Transparency services
Regulators have increased their demand for greater transparency on various aspects of the financial sector in order to either identify and monitor potential systemic risks or to increase investor protection through better access to transparent information. All financial actors will have to comply with new reporting or information demands, especially those linked to pricing or risk elements. This is the case in the OTC derivatives space but also applies to traditional investment products (for example, the implementation in Europe of the Key Investor Information document (KIID) for UCITS). Intermediaries, and custodians in particular, will be best placed to help their clients with these new reporting requirements by leveraging their valuation and custody information.

One probable outcome: Passing through additional costs to end-users
The overall impact of all these changes on intermediaries and FMIs will vary greatly depending on the circumstances and firms’ willingness and ability to profitably take advantage of opportunities. Some will need to pass through fee increases and indeed many have already started this process. However, profitability rather than gross revenue will be the key yardstick for intermediaries going forward, and many may well review their client base. In parallel, intermediaries will review their cost base in detail, including fees charged by FMIs. Acknowledging the profitability squeeze faced by
participants and the related pressure on fees, FMIs will have to also review and optimize their cost base before envisaging any fee increase, especially in a context where competition between FMIs may develop.

These and other impacts detailed later in this report are depicted for intermediaries and FMIs, respectively, in the two following charts:

**Summary of Regulatory Changes Impacting Financial Intermediaries**

- **Market Regulation**
  - Impact on IT and adaptation costs
  - Increased capital requirement
  - SIFIS
  - LEI

- **Conflict of Interest Rules**
  - Impact on service portfolio
  - MFID: ban on inducements
  - T+2
  - New settlement discipline framework
  - Vickers and Volcker: constraints between custody services and

- **Tax**
  - Impact on IT costs
  - FATCA, FTT
  - Impact of profitability of transaction services

- **CSD**
  - Impact on level playing field
  - CSDR: CSDs role and services, willing to move up the value chain
  - T2S: removal of local settlement franchise

- **Access to Infrastructure**
  - OTC Derivatives (EMIR, DFA)
  - FATCA, FTT
  - Increased need to access market infrastructures (CCPs, and TR)

- **Collateral**
  - EMIR- DFA – Banking rules: requirement for collateralization of all counterparties risk
  - Increased need for collateral optimization and transformation

- **Outsourcing**
  - MIFID, EMIR
  - Increased operational complexity to operate transactions.
  - Increased demand for M/O and B/O outsourcing

**Liability**
- Increased liability
  - AIFM, UCITV: restitution obligation
  - SLD, EMIR: Assets segregation
  - Change in services offered (exit countries?) and prices to financial intermediaries and custodians.

**Risk absorber**
- Financial Intermediaries Custodians

**Buy side**
In closing this introduction, we underscore that the recent regulatory changes place significant extra costs on intermediaries and FMIs, require a greater absorption of risk, and bring the issue of managing the business on a risk-based capital basis to the fore. New and enhanced opportunities are available for those well positioned, but they must possess undoubted execution capabilities.

It remains to be seen if the shift of risk to intermediaries will be properly priced to customers. If not, the seeds of a future crisis will likely be planted.

Market infrastructures are generally in a good position but only the most dexterous European FMIs will survive the changes in Europe resulting from T2S and T+2.

### 1.3 Scope and Objectives of the Report - Regulatory Trends and Impacts

The Scope of this Report includes a review of trends and objectives in financial market and financial institution regulation and the resulting effects the current regulatory initiatives are likely to have on the industry "environment", financial intermediaries and infrastructure entities. The Report describes, and offers analysis of, notable regulatory initiatives underway in the United States, Europe and Asia, and it compares the similarities and differences across the regulatory initiatives in those separate regions.
In so doing, the Report keeps a view on five major objectives that have driven financial regulation over the past several years. These key objectives are: reduce risk in general and systemic risk in particular; increase transparency for the benefit of regulators, investors and financial markets generally; increase standardization in order to reduce operational risk and promote productive uniformity; reduce costs and increase efficiency at various industry service levels; and promote level playing fields among competitors. As a related theme, the Report notes that during the recent crises, the equities and bond markets continued to function well, with no failure of market infrastructures or significant custodians. Regulators appear to believe based on that experience that expanding the market models that exist for those instruments to all areas of financial activity, including in relation to products and actors, will most advance current, overall regulatory objectives. Hence, regulators are keen to increase industry use of market infrastructures - even requiring the installation of market infrastructures in new areas – and are looking to introduce a systematic, tiered market organization that encompasses all financial actors, including buy-side players.

As part of the Report’s discussion of the costs of proposed and anticipated regulation, the Report also notes the difficult but necessary public policy balance between introducing new regulation to meet particular policy objectives as against the costs to the industry, participants and governments – both short-term and long-term -- of the work necessary to ensure compliance with new or changing requirements. In this regard, among other things the Report notes ways in which regulatory provisions may not efficiently achieve the intended objective, either because the provisions do not address the right issues or because they create greater burdens than benefits. Tipping the balance beyond achieving narrowly-tailored regulatory objectives toward imposing material new aggregate costs and thus impairing economic growth seems ill-advised.

1.4 Report Chapters

This Report contains 6 Chapters.

Chapter 2 reviews the differing (and the similar) trends in regulation in the EU and the US, on the one hand, and in Asia, on the other. We outline the regulatory main focus in the EU and US - risk reduction, with immediate "remedial" actions in some areas. In Asia, in contrast, regulatory initiatives have mainly focused on securities ownership transparency (i.e., know-your-customer/anti-money laundering) and on continued, but controlled, development of their financial markets (in some cases, opening and liberalizing access) without falling prey to mistakes of the more developed markets. Hence Asian regulators closely monitor what is taking place in US and EU but seem likely to evolve and regulate in their own ways, typically consistent with local experience and culture.1

The third, fourth and fifth Chapters analyze the impact of current adopted, proposed and anticipated regulation – on the market and industry environment generally; on financial intermediaries; and on market infrastructures. In each Chapter, we review the various implications and cross-applications of the many pieces of post-crises legislation and regulation.

Finally, a brief set of concluding notes is set out in Chapter 6.

1 G-20 governance will help ensure a consistent approach globally, and Asian regulators will develop their market with reference to the new G-20 standards. However, industry should be alert to the potential for regulatory arbitrage on issues not on the G-20 agenda.
2. Regulatory Trends

Historically, regulatory initiatives have been driven to support five main objectives: reducing risks, increasing transparency for the benefit of regulators, investors or the market globally, increasing standardization, reducing cost and foster competition. Today, regulatory focus is almost exclusively on managing and reducing risk, especially systemic risk. The avalanche of legislative initiatives undertaken today at a global and local level is a direct consequence of the financial crisis experienced in 2008. In order to prevent another financial disaster like the bankruptcy of Lehman Brothers or the bail-out of AIG, regulators and governmental authorities put as a key priority the definition and implementation of new rules designed to ensure the stability, safety and integrity of the financial markets. One of the key objectives of the corresponding proposals is to fight against any form of systemic risk that could eventually endanger the financial system as a whole.

The resulting, far-reaching legislative initiatives -- launched all over the world -- notably seek to meet the commitments agreed on by the G-20 leaders in September 2009. These new requirements aim to address four main objectives:

- 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.

Although the G-20 agenda is a key driver in all regions of the world the emphasis, the priorities and the approach taken are different across the regions.

High impact regulatory changes

Of the many regulatory changes that will impact the securities industry around the globe, two stand out as having the greatest overall impact: Basel 3 and the move of OTC derivatives to clearing.

Basel 3

Basel 3 will have a profound effect on the banking industry. Banks will be forced to maintain a far higher capital buffer against their risk weighted assets. This will force banks to consider alternatives to increased capital via such means as equity issuance, the greater retention of profits and the issuance of other securities that qualify as high grade capital to include contingent convertible (COCO) bonds in Europe, and it will compel banks to reduce their level of risk assets and/or re-position the composition of assets in favor of those that attract a lower capital charge. Intermediaries, as banks or part of banking organizations, will be subject to this squeeze on capital. Traditionally custody and clearing have attracted relatively low capital charges but this is changing to reflect the extra risks they are being forced to shoulder as detailed here and in the report of Working Group 2. The level of capital required will nevertheless remain low compared to investment bank or trading activities. Under Basel 3 banks will also be required to comply with strict liquidity ratios, which will force them to hold some highly liquid assets. Custody activity generally provides access to large liquidity sources through client cash accounts or securities assets, for example, at least in relation to client transactions and settlements. Large global banks, as part of their strategic review of clearing and custody services, will need to weigh the relatively low capital demand and access to liquidity against the lower margins, and then decide whether to retain or dispose.
**Move of OTC derivatives to central counter-party clearing**

The size of the OTC derivatives market is immense ($647 trillion in notional value as of December 2011 according to BIS) and its move to central clearing will create a clearing revenue opportunity well in excess of a billion dollars. There is much detail still to be defined by the regulators, including the precise definition of “standard” contracts eligible for clearing as opposed to the more exotic contracts that will continue to be bilaterally settled. This huge shift to central clearing will by some industry estimates give rise to a need for an extra USD 1 trillion in high quality collateral that can be pledged to CCPs. The full implications of this collateral shortfall are still unclear, but many believe an active market will develop for exchanging lower-quality collateral with a haircut for high-quality collateral (so-called “collateral transformation”). The squeeze on collateral may also result in lower trading volumes in these instruments.

The following sections discuss specifics of the differing regulatory trends in the United States, Europe, and Asia. Brief highlight discussion of trends in the Americas more generally – notably in Canada and Brazil – is set out in a separate ANNEX B.

### 2.1 The Trend in the United States

**The Dodd-Frank Act**

The Dodd-Frank Act, whose primary objectives are to increase market and data transparency, to promote financial stability in the US and US markets, and to protect investors, is the principal post-crisis financial regulatory statute in the U.S.

Since its enactment in July 2010, regulators have been working overtime to implement a huge number of statutory provisions through rulemaking. Despite their efforts, recent reports suggest that half of the Dodd-Frank rulemaking deadlines have passed. A lack of resources, opposition from business and industry, and in some cases, legal challenges, are among the reasons for delay in implementation. In addition, with presidential elections set for this Fall, it is uncertain how much specific legislation will issue this year. Despite the rulemaking delays, regulators have finalized certain significant rules that promise to have a substantial impact on the regulatory landscape.

The focus in the US has been on preventing new financial crises similar to that of 2008-2009. This focus requires reducing risks in the marketplace and increasing the soundness of financial institutions, enabling them to absorb volatility in the markets and thereby reducing the chance of future bail-outs. To this end, regulators have made progress in overhauling the OTC derivatives markets, identifying and monitoring systemically important financial institutions, restricting proprietary trading in banks and reining in and regulating investment advisers to private funds. All these areas were important factors in the 2008 financial crisis.

With respect to the OTC derivatives market, the Dodd-Frank Act increases transparency and reduces risk by requiring registration of swap dealers and major swap participants, by requiring central clearing and trading for derivatives capable of being cleared, by instituting recordkeeping and reporting to swap data repositories, and by setting capital, margin and financial resource requirements on market participants together with standards of conduct applicable to swap dealers/swap participants. Federal regulators, specifically the Commodity Futures Trading Commission (“CFTC”), have made progress in finalizing certain rules, including regulations on position limits for futures swaps, business conduct standards and registration requirements for swap dealers and major swap participants, and swap data reporting and recordkeeping.

The CFTC are, however, challenged to coordinate their regulations with other regulators. The CFTC has put forth a list of final rules that it will focus on for 2012, which
includes, but is not limited to, regulations on clearing, end-user exceptions as well as entity definitions, i.e. swap dealers and major swap participants. Businesses are eagerly awaiting the final rules regarding the definitions of swap dealers and major swap participants, and entities await final rules on the end-user exceptions as these will play a significant role in determining how and how much business entities as investors are affected.\(^2\)

To promote financial stability in the U.S. and to reduce systemic risk, the Dodd-Frank Act provides for enhanced prudential standards for systemically important financial institutions, including bank holding companies with more than $50 billion in assets. In addition, the Dodd-Frank Act created the Financial Stability Oversight Council ("FSOC") to assist in monitoring systemic risks in the marketplace and identifying and overseeing systemically important non-bank financial institutions and financial practices as well as financial market utilities, and payment, clearance and settlement activities.

The FSOC has not yet designated non-bank financial companies or market utilities as systemically important, but is understood to be close to doing so. In July 2011, the FSOC adopted final rules describing a two-stage designation process for designating financial market utilities ("FMUs") as systemically important, which would subject such entities to risk management standards governing the operations related to their payment, clearing, and settlement activities. In its December 21, 2011 meeting, the FSOC advanced certain FMUs to stage 2 of the designation process. In addition, in October 2011, FSOC issued a second proposed rulemaking describing the three-stage process, proposing quantitative metrics, and offering guidance for designating a nonbank financial company as systemically important.

The Federal Reserve also made progress in its effort to enhance prudential standards by proposing to strengthen the regulation and supervision of large bank holding companies and systemically important nonbank financial firms. In December 2011, the Federal Reserve proposed a number of measures, including risk-based capital and leverage requirements, liquidity requirements, stress tests, single-counterparty credit limits and early remediation requirements. In addition, the Federal Deposit Insurance Company approved a final rule requiring an insured depository institution with $50 billion or more in total assets to submit periodic resolution plans in the event of its failure.

The Volcker Rule under the Dodd-Frank Act

The Federal Reserve, in a coordinated effort with other U.S. federal regulators, proposed rules implementing the "Volcker Rule" under the Dodd-Frank Act, which restrict the ability of a banking entity and non-bank financial company supervised by the Federal Reserve to engage in proprietary trading or to have interests in hedge funds and other private funds. This proposal has proven controversial due to its complexity and the significant impact it would have on financial institutions in the U.S. Compliance with the Volcker rule will be burdensome, as firms will be required to develop compliance programs and infrastructure will be subject to reporting and recordkeeping requirements. General concerns about the proposal include the potential that the restrictions of the

\(^2\) Meanwhile, in Europe, due to similar delays, the corresponding regulations under EMIR are likely to take effect in about 2013. Given that eventual deadline, international regulators are giving priority to regulation of liquid and relatively standard OTC derivative products such as single-currency interest rate swaps. Other liquid Rates and Credit instruments will likely follow suit soon. Currently, cash Foreign Exchange ("FX") products, such as FX Spot and Forwards (and Swaps), have been exempted by the US Treasury and therefore are likely to be exempted by European and Asian counterparts. OTC FX derivatives, however, will remain subject to clearing and other reporting rules on a global level.
Volcker rule will produce a less efficient marketplace, drive up investor costs, and place US firms at a disadvantage as against foreign entity counterparts. Although the public comment deadline was February 13, 2012, it is uncertain when a final rule will be issued, when those rules – and which of the many proposed details -- will have to be implemented.

Hedge funds -- heavily scrutinized as having contributed to the financial crisis -- have also been reined in by the Dodd-Frank Act, as advisers to hedge funds and other private funds are now required to register with the Securities and Exchange Commission and provide additional Investment Adviser registration information concerning the private funds they advise. In addition, advisers to private funds who remain exempt from registration will also be required to provide additional information about the private funds they advise. Furthermore, registered investment advisers to private funds will be subject to separate reporting on a new reporting form designed primarily for the assessment of systemic risk by the FSOC. This reporting requirement is intended to enable regulators to gain valuable data that has been historically lacking concerning private funds and the systemic risks they pose.

While the aforementioned reform measures will assist in reducing systemic risk, promoting financial stability and protecting investors, observers continue to ask whether the costs outweigh the benefits.

This US legislation has raised concern in the US as to whether the new regulatory burdens were really necessary given the extent to which they will hurt businesses at large. If the scope of the rules is over reactive, the dangers and risks being addressed will be overstated. In addition, the measures imposed on financial institutions may create too-onerous regulatory burdens relative to appropriate scope. The reality is that the regulatory reform measures currently planned under the Dodd-Frank Act will continue to have significant implications on businesses, including technology and operational challenges, as well as additional mandatory monitoring, compliance, clearing and reporting responsibilities. Furthermore, an effective set of rules will require coordinated regulatory efforts not only within the U.S., but globally, to ensure that all market participants operate on a level playing field.

2.2 The Trend in the EU

As in the US, Europe is actively working on strengthening financial regulation and implementing the G-20 agenda. The financial crisis that began in 2007 is the worst Europe has faced since the 1930s. Originating primarily in the US subprime mortgage market, it proved to be highly contagious, spreading rapidly via the use of complex financial products. The 2011 sovereign debt crisis is partly linked to the banking crisis but has its own origins and may aggravate the position of the financial sector further. Knowing that the financial markets are at the heart of these crises, the European Commission has launched a comprehensive program of financial regulatory reform which is well on track towards completion. Whereas in the US the financial regulatory reform is based on a single text -- the Dodd-Frank Act -- Europe has addressed its reforms through a large number of specialized legislative texts. In 2011 alone, the Commission put forward 25 legislative proposals, including two very significant packages revamping bank regulation and capital market regulation.

To establish a properly supervised financial system and increase cooperation between national regulators, the EU has established three new European supervisory authorities which have been operational since January 2011: the European Banking authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Securities and Markets Authority (ESMA).
In addition, one of the key elements of the Commission's reform program has been to strengthen the resilience of the banking sector. Europe first revised its capital requirement directive to strengthen market risk by implementing Basel 2.5 and in July 2011 the Commission proposed a significant reform to raise bank's capital based on Basel 3 recommendations. Rules on remuneration and on governance of financial institutions have also been adopted. In parallel with its actions to reinforce the banking sector, the Commission is currently preparing the new framework to ensure solvency of insurance companies, which is scheduled to be fully implemented in 2014. To complete the G-20 agenda on the banking sector, the Commission is expected to propose before the end of the year a crisis management framework requiring a recovery and resolution plan for banks and rules for regulator cooperation.

European authorities have also developed a number of legislative initiatives aimed at strengthening the capital markets, including reform of the derivatives markets. With the revision of MiFID (MiFID 2 is still under discussion) and the new regulation, EMIR, all standardized securities, including OTC derivatives, will be traded on regulated platforms and cleared by central counterparties. The revision of MiFID will also extend existing rules regarding transparency and conduct of business to new and innovative types of trading platforms, with the twin goals of ensuring safety and creating a level playing field. In addition to limits on speculative practices, Europe has also adopted regulation concerning increased short selling transparency and allowing supervisors to restrict or ban short selling in certain circumstances. Similarly, transparency is increased in the CDS market and naked CDS on government debt is banned. The commission has also introduced in the Alternative Investment Fund Managers Directive (AIFMD) new requirements on fund managers and in particular hedge funds to increase transparency and enhance risk management.

Finally, the Commission’s initiatives including AIFMD aim to broadly improve investor protection and restore public confidence in financial markets. It imposes on a depositary (an entity in charge of safekeeping of AIF assets and oversight functions around asset management decisions) -- for any fund distributed in Europe. The Commission has also proposed upgrades in the deposit guarantee and investor compensation schemes.

Beyond the implementation of the G20 agenda, the European Union is continuing its overall work toward the integration and harmonization of the single market, both from an horizontal and a vertical perspectives. For example, the European Commission is nearing a proposal on packaged retail investment products intended to harmonize regulatory requirements for retail investment products, in particular distribution rules and information disclosure. The best illustration of this overarching goal of building the single market is the systematic inclusion of passporting possibilities throughout the European Union, which surfaces in all the important pieces of new regulation such as AIFMD, MiFID, EMIR and the CSD regulation. The passport’s principle is that EU-regulated institutions or products that are authorized in one country will be able to offer their services, or will be eligible for sale, respectively, in other EU countries without any additional authorization requirement.

The legislative initiatives are also used to increase harmonization across Europe. For example the variances in standard settlement periods - already emphasized in 2003 - are addressed through the proposal for a regulation on improving securities settlement in the European Union and on central securities depositories (CSDs)

---

The following table identifies the various pieces of legislation proposed by the Commission to reform the European financial system and the status of progress on each.

<table>
<thead>
<tr>
<th>Date</th>
<th>BANKS AND INSURANCE UNDERTAKINGS</th>
<th>FINANCIAL MARKETS</th>
<th>CONSUMERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2010</td>
<td>CRD3 NEW RULES ON REMUNERATION, PRUDENTIAL REQUIREMENTS AND GOVERNANCE OF FINANCIAL INSTITUTIONS*</td>
<td></td>
<td>REVISION OF DEPOSIT GUARANTEE SCHEMES*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>REVISION OF INVESTOR COMPENSATION SCHEMES</td>
</tr>
<tr>
<td>September 2010</td>
<td>INTRODUCTION OF THE EUROPEAN SYSTEMIC RISK BOARD AND THE EUROPEAN SUPERVISORY AUTHORITIES FOR BANKING, SECURITIES AND MARKETS, AND INSURANCE*</td>
<td>PROPOSAL ON OVER-THE-COUNTER DERIVATIVES*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PROPOSAL ON SHORT SELLING AND CERTAIN ASPECTS OF CREDIT DEFAULT SWAPS*</td>
<td></td>
</tr>
<tr>
<td>October 2010</td>
<td>PROPOSAL ON HEDGE FUNDS AND PRIVATE EQUITY*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 2010</td>
<td>REVISION OF FRAMEWORK ON CREDIT RATING AGENCIES REFORMS (PART 2)*</td>
<td>SEPA PROPOSAL (SINGLE EURO PAYMENTS AREA)</td>
<td></td>
</tr>
<tr>
<td>March 2011</td>
<td></td>
<td>PROPOSAL ON MORTGAGE CREDIT</td>
<td></td>
</tr>
<tr>
<td>July 2011</td>
<td>REVISION OF THE CAPITAL REQUIREMENTS FOR BANKS (CRD4)”</td>
<td>RECOMMENDATION ON ACCESS TO A BASIC BANK ACCOUNT</td>
<td></td>
</tr>
<tr>
<td>October 2011</td>
<td>REVIEW OF THE FRAMEWORK FOR MARKETS IN FINANCIAL INSTRUMENTS (MIRD) AND MARKET ABUSE*</td>
<td>REVIEW OF THE FRAMEWORK FOR RULES ON ACCOUNTING AND TRANSPARENCY</td>
<td></td>
</tr>
<tr>
<td>November 2011</td>
<td>REVISION OF FRAMEWORK CREDIT RATING AGENCIES (PART 3)*</td>
<td>REFORM OF THE AUDIT SECTOR</td>
<td></td>
</tr>
<tr>
<td>December 2011</td>
<td>PROPOSAL FOR A VENTURE CAPITAL REGIME</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.3 The Trend in Asia

Identifying common trends in the Asia-Pacific regulatory environment is difficult due to the differences in market development and economic systems within jurisdictions and across the region. There is no pan-regional financial regulatory framework, and each market regulator can have specialized priorities. Moreover, while Asian financial hubs like Japan, Hong Kong and Singapore largely coordinate with global trends, global reform initiatives focused on containing financial risk in advanced financial markets may have little relevance to the situation of developing economies in the region. Even so, desire for market development and stability is a common factor across the Asia-Pacific region, and this desire is reflected in domestic reforms and in regional initiatives as well as in seeking compatibility with global standards.

Asian Bond Market Initiative (ABMI)

The Asian Bond Market Initiative, which was endorsed at ASEAN+3 Finance Ministers Meeting in 2003, aims to develop efficient and liquid bond markets in Asia, enabling better utilization of Asian savings for Asian investments. Since then, establishment of a Regional Settlement Intermediary (RSI) has been studied to reduce risks and costs of regional bond transactions. A Common platform Model is also being introduced by Hong Kong, Malaysia and Euroclear in order to improve the cross-border investment and settlement infrastructure for debt securities in Asia.

---

4 ASEAN+3: 10 countries of the Association of Southeast Asian Nations (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam), together with China, Japan, and South Korea
Even though some initiatives to develop efficient settlement infrastructure in the region have been introduced, the time is not yet right to establish RSI because ASEAN+3 have varying market practices and the discussion around RSI proceeds slowly.

Therefore, it is timely to foster standardization of market practices and harmonization of regulations relating to cross-border transaction in the region. Currently, the Technical Working Group (TWG) is conducting a feasibility study of the establishment of RSI, and ASEAN+3 Bond Market Forum (ABMF) is studying vitalization of bond markets and standardization of the process, aiming at Straight-Through Processing (“STP”) for cross border transactions in the region.

T+2

A T+2 settlement cycle is already realized in Hong Kong, India, Indonesia, Korea, Maldives, Pakistan, and Taiwan. On the other hand, the settlement cycle in Japan, Malaysia, Singapore, Thailand, and China (B shares) is T+3, and efforts in those markets to reduce settlement cycles have been unable to gain the support of enough market participants. Nonetheless, discussions around shortening settlement cycles from T+3 to T+2 continue in the region.

Generally moving to T+2 will reduce the settlement risks to a large extent, which overall leads to an increase in market soundness and safety. On the other hand, because more than half of the investment capital (especially in equity markets) in Japan comes from overseas, market participants need to take various measures to ensure smooth settlement processes on trades for overseas investors – even as the settlement cycle is shortened. Since Japan is located in a time zone where the markets open earlier than elsewhere in Asia, the impact of shortening the settlement cycle in the process flow will be felt much more than in US/EU countries.

Central counterparty (CCP) for OTC derivatives

G-20 members in the Asia-Pacific region, namely China, India, Japan and Korea, have announced initiatives to mandate CCP for OTC derivatives transactions. The People’s Bank of China has required the use of standardized documentation and reporting for OTC derivative transactions, and it is promoting the use of Shanghai Clearing House (SHCH) for clearing. In India, the Clearing Corporation of India Limited (CCIL) acts as a CCP for OTC derivatives, and it is reviewing the feasibility of clearing all OTC derivatives through CCIL. In Japan, legislation for mandatory CCP clearing and trade repositories has been enacted and implementation is proceeding. The Japan Securities Clearing Corporation (JSCC) has already commenced clearing of credit default swaps and is planning to add interest rate swaps to its service. Korea plans to set up a CCP for OTC derivatives by the end of 2012. Legislation there is awaiting approval by the National Assembly, while the FSC is reviewing the establishment of a trade repository. The Korea Exchange (KRX) - designated as the first CCP - announced that it will begin clearing IRS first, later followed by NDFs and CDS.

Non-G20 jurisdictions are also taking measures regarding CCPs for OTC derivatives. The Singapore Exchange already offers clearing for OTC commodity derivatives and interest rate swaps. The MAS has issued a consultation paper on proposal to regulate OTC derivatives pursuant to the G20 commitments. In Hong Kong, the HKMA has proposed the legal framework for the establishment of a CCP and trade repository in 2011. Locally incorporated financial institutions will be required to clear and report derivatives transactions through a clearing platform operated by the Hong Kong Exchange (HKEx). In Taiwan, the FSC entrusted the GreTai Securities Market (GTSM) to develop a Trade Repository for OTC derivatives trades. The implementation of the Trade Repository will be carried out in 3 phases, incrementally categorized by financial
instruments, and will be completed in 30 June 2013, with the first phase scheduled for launch on 2 April 2012.

Currently, it is difficult to predict what the implications of these developments will be. The products to be cleared and the scope are yet uncertain. There is also the question whether these markets will be liquid enough to create and sustain their own CCPs. In markets other than Japan, Singapore and Hong Kong, OTC derivatives volumes are generally low. However, many regulators in the region are understandably pushing for domestic CCPs, since they want to regulate derivatives activity and improve the efficiency and transparency of OTC derivatives transactions in their own markets.

**Basel 3**

The China Banking Regulatory Commission (CBRC) published draft rules in line with Basel 3 guidelines in August 2011. Systemically important banks must comply with the requirements by the end of 2012, and other banks by 2016. The Reserve Bank of India issued draft guidelines on Basel 3 capital regulations, and implementation of the minimum capital requirements will begin in January 2013 with full implementation scheduled by 2017.

In Japan, the FSA intends to implement Basel 3 capital standards in a phased-in approach from 2013 to 2019. The FSA will develop rules on liquidity standards and leverage ratios according to the final Basel accord. Hong Kong amended the Banking Bill in 2011 to set the legal framework for implementing Basel 3 requirements, and these amendments will require revision of liquidity, capital and disclosure rules. The HKMA intends to implement Basel 3 according to the timetable proposed by the Basel Committee. The MAS will implement the Basel 3 minimum standards by January 1, 2013, for banks incorporated in Singapore. Banks will be required to meet standards higher than by January 2015.

Korean regulators have reviewed the impact of adopting Basel 3, and the FSC has launched a Task Force (T/F) to consider the overhaul of regulation to meet Basel 3 standards.

In Taiwan, the FSC, in order to strengthen the capital adequacy and risk management of financial institutions in Taiwan, has required banks to draw up suitable plans for long-term capital allocations and dividend policies.

Many Asian regulators have already imposed stringent capital requirements following the Asian financial crisis of 1998, and as a result Asian markets may be less affected by the new requirements than their western counterparts. Asian regulators seem eager to adopt Basel 3, and some are imposing higher standards on their larger banks, while some Asian markets have not yet moved to implement Basel 2.
3. Analysis of Regulatory Impact on the Environment

The wide-ranging and heavy amount of post-crisis regulation in the United States and the European Union places heavy pressure on policy formulation and eventually may exert similar challenges on supervisory and enforcement activities. This in turn creates a growing risk that insufficiently-prepared regulation may generate negative or unintended consequences that may be enforced by resource-constrained regulators and enforcement agencies in sub-optimal ways.

Far-reaching regulatory proposals also put significant demands on market participants as they work to internalize the regulatory details and assess the impacts of these initiatives. In sum, extensive resources will be spent on implementing any necessary changes - resources that ideally will supplement the development of new products and services of benefit to the investor community at large. The aggregate additional costs of change will have to be borne at least partially by end investors.

There is no guarantee that new regulation will meet regulators' objectives, namely (i) strengthening the level of consumer (and to some extent taxpayer) protection, (ii) reducing counterparty risk and (iii) increasing transparency. Increased transparency may narrow trading margins, regulatory and compliance costs may expand disproportionately, and profit margins may suffer for an extended period of time, calling for increased industrialization, alternative sourcing, joint ventures and ultimately consolidation and business line concentration. It is not clear on a net basis how much those changes will benefit consumers.

Certainly, the shortage of collateral in the financial system will become an even more pressing problem, as various financing and exposure management processes increasingly call for collateralization. Banks will need to hold higher liquidity buffers, and more collateral will need to be set against central counterparty and bilateral counterparty credit exposures. Increasingly, investors may also be required to provide (more) collateral to their counterparties.

Those are the more obvious potential consequences. Unintended consequences could include varying regulatory developments in different jurisdictions or geographies with a resulting risk of regulatory arbitrage. Nuances in varying regulatory approaches to identical issues will significantly impact globally active industry players due to multiplication of efforts to achieve relatively uniform results.

To further develop the foregoing points, this Chapter will describe the numerous likely impacts of specific EU regulatory initiatives on the financial industry "environment" by referring to concrete and specific piece of regulation.

3.1 Impacts of MiFID 2

New regulation -- MiFID 2, as proposed -- is intended to establish a harmonized framework to enable financial services providers based outside the EU to obtain access to EU markets. Such "external" providers may need to be compliant with rules like MiFID 2 when dealing with clients domiciled in EU member states in order to minimize the risks inherent in cross-border operations.

General obligations and opportunities under MiFID include the following: the extension of the pre- and post-trade reporting regime, coupled with a reduction in time allowed before reporting post trade, may reduce block trade volumes; extended regulatory oversight and control over high frequency trading may hinder the growth
recently experienced in Direct Market Access volumes; dark pools and crossing networks subject to this regulatory regime may potentially experience reduced growth and increased pricing pressure.

The call for most securities to be traded on regulated trading venues may put pressure on margins as reduced bid-ask spreads increase trading velocities and volumes. In contrast to that complication, the expansion of regulatory oversight and more transparent pricing sources may attract additional investors to the various markets.

Increased collateral requirements will impact institutional and corporate investors and hedgers. However, regulatory calls for central clearing and increased margin postings (e.g., as in EMIR and Dodd-Frank) will give financial service providers growth opportunities in collateral-related products and services.

### 3.2 Impacts of EMIR

Expanded application of a central clearing obligation would apply to financial counterparties that enter into eligible derivatives contracts with other financial counterparties or third country entities. A non-financial counterparty becomes subject to the obligation only if its positions exceed a certain clearing threshold.

Financial and non-financial counterparties subject to the obligation will need to become either a clearing member or a client of a clearing member in order to meet the new obligation. Financial and non-financial counterparties subject to the mandatory clearing obligation that enter into uncleared derivatives transactions have to ensure that procedures and arrangements are in place to measure, monitor and mitigate operational and credit risk. Risk mitigants would include timely confirmation of the contract terms and the posting of collateral.

These requirements may lead to increasingly standardized products as product innovations follow best process models. More volume and new products will be cleared centrally, spurred by the requirement on buy side firms to clear their transactions centrally. General Clearing Member services would seem to be in clear demand.

**Reporting**

Financial counterparties will be required to report details of their OTC derivatives contracts and any modification thereof to a registered trade repository or to the regulatory authorities if no such trade repository is available. On the other hand, a non-financial counterparty need only report its contracts if its positions exceed an information threshold.

**Segregation**

Under the proposal, Central Counterparties will be obliged to require each clearing member to identify and segregate the assets and positions of each of the clearing member’s clients from the member’s own assets and positions. In addition, Central Counterparties would need to (i) segregate collateral received from their own assets and (ii) segregate assets and positions from one clearing member from those of any other clearing member.

**Collateral**

When determining counterparty risk, under the proposal a client may treat its exposure as a zero capital weighting if a contract is cleared through an EU-authorized Central Counterparty and if it is not exposed to the default of the clearing member through which it has access to the CCP. However, a CCP will most likely only accept
highly liquid collateral presenting minimal credit and market risk to cover its exposure to clearing members; haircuts will be applied and will take into account liquidity and concentration risk. These requirements will accentuate the demand for eligible collateral. A global clearing member may have an expanded opportunity to offer its clients a service of managing margin and collateral across multiple CCPs.

**CCP Interoperability**

Central Counterparties established in non-EU countries will be permitted to provide clearing services to parties established in the EU provided they are recognized by the European Securities Market Authority. CCP interoperability is justified to support the EMIR proposal to expand the right of access to relevant data and systems. Interoperability on a CCP level will advance competition among these infrastructure entities but also will enable a client to optimize its exposure, margin requirements and collateral allocation processes.

### 3.3 Impacts of AIFMD

After industry debate, the European Council and the European Parliament adopted the AIFMD in 2011, with a timeline for Member State enactment in 2013. Meanwhile, ESMA has published its final advice to the European Commission as part of the Level 2 process, and the European Commission is currently considering what provisions to recommend.

Broadly speaking, this Directive will affect any alternative asset manager seeking to raise institutional capital in Europe and, as such, is not limited to the asset managers domiciled in the European Union. It strives to create a harmonized regulatory framework across the EU for all non-UCITS fund managers, by ensuring enhanced transparency and investor protection. Under an "EU Passport for Alternative Investment Funds", marketing of such structures to professional investors should be facilitated across Europe. The passport will only be available for marketing to professional investors, whereas Member States are given the flexibility to allow the marketing of certain fund categories also to retail investors within their jurisdiction.

Many alternative investment fund managers not previously covered will be subject to regulation and will potentially be required to maintain significant amounts of regulatory capital. A minimum capital base of at least EUR 125,000 appears applicable.

Significant and elaborate disclosure and reporting requirements will entail significant changes to the fund managers' processes.

Given that AIFs will be marketed to retail investors - and depending on the applicable rules taken by each member state - asset managers resident in the EU will need to reconsider their strategies and products in the wake of the potential narrowing of categories of eligible investors and the increases in operating costs. This need arises under AIFMD but also under a sleuth of other regulatory initiatives in the works. Asset managers may also be subject to contract renegotiations initiated by custodian banks acting as depositaries for fund portfolios – this, in the wake of the heightened liabilities imposed by AIFMD on the custodian industry.

### 3.4 Impacts of UCITS V

Following swiftly on the heels of the implementation of UCITS IV, the EU Commission has initiated consultations on various aspects amending this Directive. "UCITS V", as these endeavors are called, aims at reviewing the current framework applicable to UCITS depositaries -- largely in line with AIFMD conditions and requirements introducing new provisions for UCITS managers' remuneration – and all
with the goal of improving investor protection. UCITS V proposals are scheduled to be issued in the first half of 2012.

### 3.5 Impacts of Financial Transactions Tax

Whereas a Global Financial Transactions Tax is unlikely anytime soon, some proposals on the European level have emerged. For example, the European Commission has issued a Legislative Proposal for a Financial Transactions Tax ("FTT"); and as part of their Budget Law 2012, France proposed a French Financial Transactions Tax. In the following discussion, the focus is on the elements proposed by the European Commission.

The tax is intended to apply on financial transactions carried out by financial institutions acting as a party to a financial transaction, either as principal or agent, or acting in the name of a party to the transaction. Financial institutions are broadly defined as including investment firms, organized markets, credit institutions, insurance and reinsurance undertakings, collective investment undertakings and their managers, pension funds and their managers, holding companies and Special Purpose Vehicles. Notable exceptions would be transactions with the European Central Bank, national Central Banks, CCPs, CSDs and ICSDs.

The tax would be levied on the purchase and sale of financial instruments before netting and settlement, on conclusion and modifications of derivative agreements, and in intra-group financial transactions as well as repos and securities lending. Collateral posting could potentially attract FTT. A wide array of financial instruments would be in scope: instruments as defined in MiFID, including shares, bonds and other securities; options, futures, other derivatives; units of shares of collective investment undertakings; and repos and securities lending. In addition, structured products (tradable securities or other instruments offered by way of securitization as defined in the CRD) or equivalent transactions. Forex spot and physical commodities transactions would be exempt.

The application would not be limited to trades in organized markets, such as regulated markets or MTFs, but would include OTC transactions. A minimum tax rate of 0.1% would apply on spot transactions and a minimum 0.01% (of notional) for derivatives. The effective rate could be much higher where multiple steps and/or multiple financial institutions are involved, though it is not yet known which parties or institutions would have to collect such tax.

The territorial application of FTT is based on the so-called "residence principle", thus catching most transactions with an EU nexus. It would apply to financial transactions where at least one party is organized in the EU. Taxation would take place in the Member State in which the financial institution is organized. A financial institution would be deemed "established in the EU" if it is authorized there, has its seat there, or has its usual address or a branch there. If a financial institution operates completely outside the EU, the transaction (and the financial institution) would still be subject to tax whenever its counterparty is located inside the EU.

The impact of FFT would be as follows:

- The tax would be payable by each financial institution that is party to the transaction, which may result in double charge where both parties are financial institutions. In that case, the party established in the territory of a Member State would be held jointly and severally liable for the payment of the tax.

- If the tax were implemented, the resulting costs would almost certainly be passed on to end users. Given the impact, financial service providers might relocate parts of their operations to jurisdictions where FTT would not apply. An FTT might have severe impacts on short-term financing, such as repos and commercial paper, given the
proposed flat rate to be charged on each transaction. High-frequency trading would be heavily impacted.

### 3.6 Impacts of CSD Regulation

The CSD Regulation proposal does more than simply revamp the regulatory framework around CSDs. It also works toward harmonization of settlement cycles in the EU on a T+2 basis (thus addressing Giovannini Barrier 6) and sets up a new regime to promote settlement discipline and punish settlement failure. It is thus both a harmonization measure and a means for continuing the theme of promoting safer financial markets.

Taken together, the proposed changes will remove some of the key Giovannini Barriers to cross-border settlements in the EU and effectively will help define where CSDs fit into the regulatory landscape. The proposal also will represent a major regulatory push to improve settlement efficiency and efficacy.

More detail concerning the impact of the CSD Regulation proposal in infrastructure entities in included in Chapter 4.
4. Analysis of Regulatory Impact of EU Initiatives, Global Initiatives, and FATCA on Financial Intermediaries

Following the 2008-2009 crisis and under the pressure of the G20, lawmakers mandated that more transactions must be passed through infrastructures in order to mitigate systemic risk, in part by virtue of using such regulated facilities but also by virtue of the resulting improvements in transparency. In parallel, regulators have requested implementation of a systematic tiered-organization structure that imposes the role of financial intermediation on clearinghouses and custodians whereby they act as buffers to more of the financial system's risk. Such proposals aim to manage systemic risk by limiting access to market infrastructures to only those with strong financials and by restoring investor confidence as custodians cover an expanded range of investment asset "loss events". The added risk load on custodians is to be supported by additional controls and due diligence as well as increased capital requirements (though at the cost of return on equity).

The European regulatory harmonization efforts taking place in years before the crisis is now projected to be buttressed with new systemic risk mitigation rules. The move to impose greater liability upon banks (and to a certain extent insurers) is deliberate. Some might see this as ironic, given the financial stress on banks and insurers during the crisis. However, under the Capital Requirement Directive (CRD) and Solvency II, respectively, banks and insurers must increase their levels of capital dramatically, in part to offset these new liabilities.

The European regulatory harmonization efforts taking place in years before the crisis is now projected to be buttressed with new systemic risk mitigation rules. The move to impose greater liability upon banks (and to a certain extent insurers) is deliberate. Some might see this as ironic, given the financial stress on banks and insurers during the crisis. However, under the Capital Requirement Directive (CRD) and Solvency II, respectively, banks and insurers must increase their levels of capital dramatically, in part to offset these new liabilities.

The effects of the specific new developments on custody are summarized below. The first sections of this chapter provides a detailed analysis of the impacts arising from European legislatives initiatives -- MiFID 2, AIFMD, UCITS V, T2S and CSD regulation, and the Financial Transaction Tax -- whereas the later sections provide an analysis of impacts resulting from the general G-20 agenda and/or other initiatives with worldwide impact - Basel 3, OTC derivatives, LEI, T+2, and FATCA.

4.1 MiFID 2

MiFID – the Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments along with an implementing Directive (2006/73/EC) and an implementing Regulation (No 1287/2006) - was the result of a pre-crisis initiative aimed at improving integration under the European internal market rather than reducing risk. It was a far-reaching directive that enabled individuals and institutions to trade financial securities throughout Europe on a level-playing field, outlawing the old concentration rules which had granted access to some exchanges only via specified local brokers. The necessary corollary of this liberation, however, was to impose uniform investor protection across Europe.

Following the crisis, the legislative intention is to complete MiFID in a recast Directive, "MiFID 2". The draft legislation published on 20 October 2011 is composed of (i) an EU Directive intended to recast the MiFID framework directive and (ii) a draft EU Regulation on OTC derivatives, central counterparties and trade repositories (MiFIR).

The recast Directive covers authorization and operating conditions for investment firms; passporting of activities across the EU; conduct of business rules and Investor protection; and powers of national authorities and ESMA. Supplementally, the Regulation addresses pre- and post-trade transparency; exchange trading of derivatives;
product intervention by national authorities; and provision of certain services without a branch by non-EU firms.

MiFID 2 specifies that custody - i.e. safekeeping and administration of financial instruments for the account of clients, including custodianship and related services such as cash/collateral management - would be reclassified from an "ancillary service" to a full "investment service", thus triggering suitability, best execution and appropriateness requirements. Custodians generally criticize this change on the ground that custody is not an investment service; custodians do not generally execute client orders, but do carry out corporate action instructions as directed by their clients and allocate odd lots on corporate actions. Neither sub-function is an "execution of orders" as intended by MiFID 1. Suitability, best execution and appropriateness requirements do not really have meaning in this context. Making custody a core service creates confusion for custodians concerning the duties required of them, since custodians generally provide post-trade services. It seems clear that the additional documentation requirements will result in additional cost to end investors without obvious increases in investor protection.

**Description of the amendments brought by MiFID 2**

The MiFID 2 Directive (setting forth guidelines and goals only) will need to be implemented by member states through national transposition legislation whereas the rules contained in the Regulation will be directly and automatically applicable in each member state and will partly recast the MiFID framework directive 2004/39/EC.

MiFID 2 would provide for the following:

The scope of transparency requirements (pre-trade and post-trade) is extended from cash securities to derivatives, and OTC (defined) bond and derivative trades are to move to an exchange context where feasible. This has symmetry with European Market Infrastructure Regulation (EMIR) and Dodd-Frank in the USA. There are also further controls on systematic internalizers.

MiFID 2 introduces a new type of regulated trading venue, the Organized Trading Facility (OTF). An OTF would have a large definition and impacting "any system or facility which is not a Regulated Market or Multilateral Trading Facility, operated by an investment firm or a market operator, in which multiple third-party buying and selling interests in financial instruments are able to interact in the system in a way that results in a contract". The broad definition of an OTF aims to ensure that all organized trading is conducted on regulated venues that are transparent and subject to similar core organizational requirements. The definition includes all forms of organized execution and arranging of trading that do not match existing categories of trading venue, such as broker crossing systems and any other type of organized execution system that brings together third party buying and selling interests. However, it would exclude pure OTC transactions (that is, ad hoc trading between counterparties not under an organized facility or system) and facilities where there is no genuine trade execution or arranging taking place in the system.

- Regarding the transparency requirement, MiFID 2 applies the existing equity pre- and post-trade transparency requirements to equity-like instruments and non-equities (i.e. bonds, structured finance products and derivatives) but provides for a new pre-trade transparency waiver regime and introduces pre-trade consolidated tapes in the equity and non-equity markets.

- Regarding the product prohibition, MiFID 2 empowers ESMA and the competent authorities: to ban specific products, services or practices in case of threats to investor protection, financial stability or the orderly functioning of markets, on a
temporarily or permanent basis; and to position reporting and position limits for market participants trading in commodity derivatives (to address excessive speculation).

- Regarding 3rd country investment firms, MiFID 2 amends the regime for firms based outside the EU that are able to operate in the EU through a branch so as to reach retail clients and via direct access to eligible counterparties, subject to approvals (and an equivalent home jurisdictional environment).

- Regarding the requirement for all algorithmic traders to become "properly regulated", MiFID 2 provides for (i) new requirements to ensure that algorithmic traders have appropriate systems and risk controls, (ii) rules to prevent algorithmic traders from adding to volatility by moving in and out of markets and introduces market circuit breakers overlaps with the Market Abuse Directive (MAD).

- Regarding inducements, MiFID 2 provides stricter requirements for portfolio management, investment advice and the offer of complex financial products such as structured products (including best execution and client categorization). Independent advisors and portfolio managers will be prohibited from making or receiving third-party payments or other monetary gains to prevent potential conflict of interest. MiFID 2 also establishes rules on corporate governance and managers' responsibility for all investment firms and inducements changes (portfolio management/ independent advice), and it provides requirements on separate disclosure of payments on "package of products".

- Regarding unbundling and complex products, MiFID 2 provides for enhanced investor protections including definition of complex products, reporting requirements for execution only, cross selling, separation of bundled services.

- Regarding Packaged Retail Investment Products (PRIPs) and complex products, MiFID 2 will now tie in with the proposals for PRIPs. Proposed MiFID 2 introductory paragraph 3.4.2 extends MiFID to cover structured deposits - they also fall within PRIPs. Structured deposits could therefore become complex products along with structured UCITS, meaning that they cannot be mass marketed on an execution only basis. If so, banks selling these products would have to ensure they are appropriate for their customers. There has been significant discussion about whether all UCITS products should be non-complex as they are now, with advisers needing to perform tests to see whether such products could fall into the non-complex bucket.

- MiFID 2 also provides for transaction reporting changes and extensive new transaction data storage requirements (overlapping with MAD and Data Central Project) and for consolidated tape of trades to ensure market data completeness.

**MiFID 2 implications for custodians**

MiFID 2 was fully expected even before MiFID 1 was implemented in late 2007. Concern surrounds the practicality of some issues, notably inducements, and the logic of extending MiFID2 to derivatives. As custodians do not see why custody is suddenly a full investment service, concerns surround the impact of applying suitability and appropriateness duties to custodians. In this regard, of note are the following implications:

- Suitability and appropriateness: MiFID 2 now provides that member states are to ensure that investment firms - when providing investment services (other than investment advice or portfolio management) - must ask the client or potential client to provide information regarding his knowledge and experience, to enable the investment firm to assess whether the investment service or product envisaged is appropriate for
the client. Custodians may have to obtain a signed undertaking from every client that the client understands the service and that it is appropriate.

- **Inducements:** Inducements will now be banned for advisors labeled "independent". Clients should be informed before investment advice is given whether there have been third party payments (that is, commission payments) and whether the advice is given on a limited number of investments. The ban on commissions might reshape the distribution models in many EU member states including France, Germany and even the UK, which has now implemented the FSA's retail distribution review (RDR). At the political level, this MiFID provision is one of the highly-debated subjects since a ban on inducements could limit the open architecture for investment product distribution and limit competition and access for retail investors to the best products. One alternative to a full ban is increased transparency and reporting of any inducements such that investors are fully informed when they make investment decisions. In this context, custodians could provide their clients with a reporting solution to facilitate these new transparency requirements.

- **Best execution:** Best Overall Result is being tightened up, which affects custodians through their "sales" of Rights, Odd Lots & Fractions arising from corporate actions.

- **Unbundling of services:** Recital 54 of MiFID 2 sets out requirements on separation of services. This is not a new concept in custody (separation of settlement and safekeeping from value-added services such as FX, cash management and stock-lending), but MiFID 2 now brings it into law, giving equivalence to the Infrastructure Code of Conduct. Unbundling may have interaction with EU PRIPs (Packaged Retail Investment Products) legislation and complex products.

As an aside, MiFID 2 poses potential overlap or inconsistency with other regulations, notably the investor protection principles of the Insurance Mediation Directive.

<table>
<thead>
<tr>
<th>The main risk for custodians involves being sued for &quot;failures of investor protection&quot; in the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- appropriateness of service provision</td>
</tr>
<tr>
<td>- prohibited or inadequately disclosed inducements</td>
</tr>
<tr>
<td>- best execution policy shortcomings on bundled services.</td>
</tr>
</tbody>
</table>

On the other hand MiFID 2 could offer custodians new business opportunities in the field of pricing reporting or facilitating inducement transparency.

The issue of custody becoming a full investment service has been discussed with EU officials, many of whom note that custody is currently regulated as part of banking regulation at member state level. The overall aim now is to have consistent, corresponding regulation at EU level. If custody regulation is not in MiFID, it will likely find its way into SLD or CSD legislation.

Current concerns are thus (i) the effect of Custody becoming a full investment service; and (ii) the impact of applying suitability and appropriateness to custodians.

The currently-anticipated MiFID legislation schedule:

| Lobbying / Trilogue with Parliament and Council | 2012 |
| Level 1 Directive and Regulation published as final | 4Q12 |
| Level 2 proposal issued | 4Q12 |
4.2 AIFMD

From the publication of the first AIFMD draft in April 2009, this legislation has arguably become custodians' greatest concern. The objective of the directive was initially to regulate hedge funds and hedge fund managers by increasing transparency and requiring proper risk management controls to limit potential systemic risk. In practice, given the broad definitions used in the text, AIFMD regulates not only alternative fund managers but all EU asset managers managing any fund which is not a UCITS. In addition, AIFMD imposes constraint on any non-EU asset manager or non-EU funds, where the funds involved are distributed in Europe.

The Directive introduces the compulsory authorization of Alternative Investment Fund Managers domiciled in Europe and requires the appointment of a depositary, making that depositary responsible for safekeeping the assets of the funds and for certain oversight duties on asset manager decisions and the fund valuation. The level of liability of the depositary is very significant -- the depositary will be liable for loss of assets held in custody and would be subject to a strict, prompt restitution obligation. The directive also requires independent valuation of the fund and its assets, including through an independent valuation agent, and places restrictions on certain investments and use of leverage.

The rules also extend, as noted, to AIFMs situated outside of the European Union who wish to market their funds into the EU. In addition, the rules introduce additional reporting and disclosures to the appropriate regulatory authorities, and they establish capital requirements and strict authorization rules. The AIFMD extends to all AIFMs which have assets under management of €100 million (including leverage) or €500 million (unleveraged). As a result, the products captured by the AIFMD include hedge funds, investment trusts, private equity funds, REITs, property and real estate funds.

The one size fits all approach has been criticized because the AIFMD was intended to capture alternative funds, which typically are suitable only for sophisticated / professional investors, but it has been extended to cover all non-UCITS products, including those meant for the retail market. As a result of this extension, the Commission has committed to review the effectiveness of the AIFMD in 2018 at which point it will also decide whether it will allow the existing private placement regimes to continue.

AIFMD implications for custodians

The main AIFMD issues for custodians lie in the increased level of liability that an alternative fund depositary must assume. Depositaries are in charge of safekeeping the assets of the fund, which includes holding in custody securities and monitoring the other assets such as derivatives or non financial assets. They may delegate this function to third parties. However, a depositary will remain responsible for all fund assets it "holds in custody" and will have a restitution obligation for any loss of assets so held. The possibility of escape from this liability is limited and is confined largely to losses caused by "external events" beyond the custodian’s reasonable control (such as force majeure). In addition, the depositary bears an "inverted" burden of proof in the event of a claim against the depositary (i.e. the depositary must prove it has done everything right). The Commission and ESMA have detailed exceptions and qualifications to this restitution obligation.
obligation, disregarding certain losses taking place at the sub-custodian level whether related to fraud or bankruptcy of the sub-custodian. Final rules are still under consideration, though the probability is that the law will impose an overly demanding liability on depositaries/custodians.

In its latest draft, the European Commission is considering requiring the depositary to be liable for assets given as collateral by the funds -- even if the securities are held as collateral outside the control of the depositary -- unless there has been transfer of ownership right in favor of the collateral taker. This new proposal, if maintained in the final rules, will have significant impacts in market structure, changing, for example, the business model for prime brokerage in Europe and limiting the ability of a fund to post collateral in bilateral transactions.

The implementation of AIFMD will introduce the following:

**On the asset management side** --

Clients may drift from the EU to less restrictive regimes, but those wishing to continue to sell into the EU from a third country would still be captured.

Hedge funds and private equity funds may relocate outside the EU, or on the contrary we may see offshore hedge fund business re-domiciling to Luxembourg or Ireland to benefit from the European passport for both the asset manager and the fund.

Increased fund charges and in particular depositary fees may emerge as a result of the new requirement, which could reduce funds’ performance and potentially the competitiveness of EU markets.

**On the custodian side** --

Due to the increase of liability/possible requirement for the custodian and depositary to provide guarantees and face expanded liability, which may result in the need for insurance policies against loss of assets.

Depositaries are unlikely to delegate custody to external parties. Pure trustee/depositary players may specialize in funds with limited or no assets in external custody or they may exit the business.

Given the increased level of liability, some custodians may exit this activity. Those remaining will have to strengthen their level of control and confidence over their sub-custodian network including their contractual relationships. In this context, custodians may decide not to offer their services in some jurisdictions. Custodians having a significant part of their client assets in house, offering both global custody and local custody in the main markets, may well be best positioned to bear this level of responsibility.

With respect to hedge fund business, depositaries will likely oppose any delegation of unencumbered assets as well as, potentially, the collateral assets now required by the prime broker. This will change the business model of prime brokerage in Europe, and may force prime brokers to accept this level of liability and develop depositary services. General systems changes will be required to existing models in order to accommodate the new rules.
4.3 UCITS V

The European Commission is expected to propose an upgrade of the UCITS directive before summer 2012, i.e., UCITS V. It is anticipated that this proposal will involve remunerations rules for a UCITS asset manager similar to what has been adopted in the AIFM as well as a sanction framework similar to the depositary liability clauses outlined in the AIFMD. The Directive was meant to be ratified by the European Parliament in January 2012 but has been delayed until June 2012 at the earliest. Despite this delay, the objective of the Commission is to have the new depositary rules for UCITs incorporated into national laws as soon as possible and close the AIFM rules implementation (July 2013).

Standards of performance and liability around custody and sub-custody may permanently rise (from an already high base), but other, related implications are also clear:

- clients will be asked to pay more for custody in some markets; and
- global custodians will exit some markets.

4.4 CSD Legislation/Regulation (CSDR)

The objectives of the forthcoming CSD regulation are twofold: first, to regulate market infrastructures at EU level and namely CSDs in the same spirit as CCPs or trade repositories have been regulated with EMIR; and second, to improve consistency and harmonization throughout Europe.

On the second objective CSDR is proposing, for example, a full dematerialization of securities (this should be an advantage to intermediaries, although some countries - notably the UK- are likely to resist dematerialization in order to placate private investors); and a maximum settlement cycle of T+2 for defined asset classes.

Under CSD legislation there may well be a requirement to implement a uniform buy-in procedure across Europe to mitigate the risk associated with failed settlements. This would affect many current operations practices, particularly in countries, e.g., the UK, that operate largely on a fines regime.

On the first objective, CSDR will define what a CSD is, what type of activities it is allowed to perform, and under what type of conditions it operates. CSDR will provide for an authorization of CSDs in Europe and a passporting of authorized activities. The basic principle -- very generally stated -- is that CSD organizations are to be allowed to provide non-core banking services provided the services are supplied by a separate legal entity rather than the CSD itself. However, in its draft the Commission proposes an exemption opportunity whereby CSDs could provide non core banking services in the same legal entity subject to a pre-review and approval by the relevant regulator as to risk mitigation measures.

In many cases the following issues may arise:

- who will provide the extra capital to support CSDs' new riskier activities?
- will CSDs be bailed out by the state in the event of failure (whereas in the future banks may well not be), and does this distort the playing field?
- what liability for errors will CSDs be able or willing to accept?
- can there be cross-guarantees between the CSD and the separate legal entity undertaking banking business, thereby undermining the degree of separation and increasing contagion between the 2 entities?

The prospect of competition between depositaries and global custodians has existed for years, particularly as CSDs have talked about developing their services for corporate actions and proxy voting. In addition, some custodians have voiced concerns regarding CSDs (particularly CSD groups) that they are able to raise prices in their utility services in order to subsidize their commercial services. Custodians have generally dismissed CSDs' ability to engage fully in corporate action servicing due to CSDs' relatively low levels of capital and unwillingness or inability to compensate clients for corporate actions errors.

The main impacts for custodians of the CSDR are:
- the adaptation of existing practices to cope with the new harmonized European practice (T+2, dematerialization), which could facilitate the streamlining of custodians internal processes; and
- the potential increase in competition between custodians and CSDs should the regulation allow CSDs to develop a large variety of banking services, perhaps to compensate for the potential loss of revenue to T2S (see below).

Given that global custodians have existed as an institutional category for about twenty-five years, one could ask whether they will necessarily exist for more than a few more years given the burdens being imposed on them. No regulator has identified an alternative to custodians as banks absorbing the risk of the securities safekeeping and handling process, particularly for cross-border investors, and in this lies a continuing business model. Improved harmonization, IT and STP, and the removal of vested interests and inefficiencies may lead eventually to a more-streamlined and lower-risk securities process, but until then custodians, and particularly global custodians, seem likely to remain a critical component of the securities services world.

4.5 T2S

Target 2 Securities is a Eurosystem initiative to provide a single settlement system in central bank money for all European securities settling today in European CSDs, in particular in the Eurozone, but potentially beyond if the central banks of the non-euro currency countries agree to it. CSDs are expected to sign the framework agreement by June 2012, confirming their participation to the T2S project. All major CSDs in the Eurozone are expected to sign.

T2S will facilitate settlement in Europe, and in particular cross border settlement, and is expected to reduce the cost of settlement at large. Although the main impact of T2S will be on CSDs, financial intermediaries will also be impacted by the T2S initiatives in various ways.

T2S will tend to eliminate much of the settlement business of local custodians as settlement is increasingly harmonized across Europe and as T2S provides a single system for settlement. The implications for corporate action processing remains uncertain, however, as harmonization in that service area will be harder to achieve than for settlement. Being closest to T2S in the operational chain, CSDs (investors CSDs) may be in a stronger position than local custodians to offer a single point of contact for pan-European settlement.
Local custodians may either tend to exit the business or, on the contrary, develop a regional offer on T2S, leveraging their corporate action expertise and client focus culture. T2S may hence accelerate custodian consolidation.

CSDs will lose almost all settlement business and at least some matching activity under T2S. CSDs will inevitably need to make up this revenue from other sources, notably by moving into the space of custodians (banking) and registrars (share register services for issuing corporates). Depending on the result of CSDR, the capacity of CSDs to develop value added services may be constrained.

T2S and the CSD Regulations could together pave the way to a radically different securities settlement landscape in the EU. T2S has set the template for settlement to be carried out within the central bank money processes for the Eurozone (to include the processes for other EU currencies in due course), and depending on cost-efficiency this mechanism should replace the currently fragmented settlement structures in the medium term.

Small CSDs have most to lose by having their settlement franchise taken away, while the large CSDs have much to gain by moving into the investor-CSD activities of smaller countries and taking advantage of economies of scale. CSDs will, as stated above, endeavor to undertake banking activities (albeit delivered by separate entities), but it seems unlikely that CSDs will wish to engage in the custodians’ capital-intensive high operational risk services, notably the collection of corporate action decisions from clients and passing them back to issuers before the established deadline. It is telling that this service is not specifically mentioned in section C of the annex to the CSD Regulation. More generally, CSDs will have limited capacity to replace custodians in their risk absorber role in the chain.

In summary custodians can expect under T2S:

- more efficient cross-border collateral management;
- abolition of settlement by local agents;
- substantial IT expenditure to connect to T2S and reshape operations;
- need to set up own branches or hub and spoke operations for corporate actions in various countries where volumes are high enough to justify it;
- an attempt by large EU custodians to act as consolidators of others’ settlement and corporate action volumes;
- an attempt by CSDs to undertake banking services in custodians’ current market;
- custodians will continue as the principal processors and risk-bearers for corporate actions. Pricing may still be weak however.

### 4.6 Financial Transaction Tax

The EU proposal for a Directive on a Financial Transaction Tax (FTT) was issued on 28 September 2011. The proposal is:

- 0.1% tax on all gross financial transactions involving an EU party (even for the non-EU party);
- it would apply to banks, insurers, asset managers, SPV and other significant financial entities;
- supranational entities, CCPs and central banks are exempt. Exchanges may be included however;
- the tax covers equity and bond trading, repo activity and securities lending;
- for derivatives trading, there is a 0.01% tax on notional value;
- the tax is chargeable to intermediaries i.e. at each stage of the trade.
The graph below summarizes the EU proposal and in particular the impact in the chain.

Summary of proposed EU tax rates for non-derivatives:

<table>
<thead>
<tr>
<th>Party</th>
<th>EU FI</th>
<th>EU Citizen</th>
<th>Non-EU FI</th>
<th>Non-EU Citizen</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>EU Citizen</td>
<td>0.1%</td>
<td>Nil</td>
<td>0.1%</td>
<td>Nil</td>
</tr>
</tbody>
</table>

The tax’s introduction currently seems improbable, though FTT would create significant IT work and reduced volumes for custodians. The more likely introduction of a stamp tax across Europe on share purchases would likely entail less effort and cost since banks already have systems that can deal with stamp taxes in the UK and Ireland.

### 4.7 International Rules or Initiatives Affecting Financial Intermediaries

**Basle 3 capital requirements**

The Bank for International Settlements has introduced further capital requirements under Basel 3 in the wake of post-crisis G20 recommendations. In Europe, Basel 3 will be implemented through the Capital Requirements Directive IV (CRD IV), which is still being negotiated by EU member states.

Regulators’ reasons for Basel 3:

- Many banks went into the crisis under-capitalized and highly-leveraged
- “Capital” was not really true capital (not fully loss absorbing)
- Capital charges did not fully capture risks undertaken in market related activities
- Severe losses from counterparty exposures occurred (e.g. to mono-line insurers)
- Certain banks were not able to withstand liquidity shocks (Bear Stearns) or were too exposed to maturity mismatches (Northern Rock)

The main building blocks of Basel 3 are:

- Capital (focus on better capital, e.g., common equity Tier 1, rather than Tier 2 and hybrid capital, and countercyclical capital buffers, leading to increased capital requirements in good economic times)
- Changes to market risk framework and counterparty credit risk
- Leverage ratio
- Liquidity ratios

G-20 has imposed a deadline of 2013 for the beginning of a phase-in period. However the level of global consistency is uncertain. Europe has already enforced some
sections of the new Basel framework, notably on market risk (Basel 2.5), and has begun the transposition process through CRD IV, but the debate has become heated over the ability for national authorities to deviate. US authorities are engaged in implementation of domestic (Dodd-Frank) legislation. They might implement Basel 3 – but to what timescale and to what degree is unclear, as they have not yet fully adopted Basel 2.

A general concern regarding regulatory and capital arbitrage in this area is growing in the industry and among some authorities.

**Main impacts of capital requirements for custodians**

The increased capital requirements under Basel 3 will have a profound effect on how banks conduct their business. Custodians and clearers are either banks themselves or are part of larger banking concerns, and they will be significantly impacted. To meet the Basel 3 standards, banks will bolster their capital base (by either issuing new equity or equity like securities or retaining more earnings) and/or will also seek to reduce their capital requirement by shedding business and assets that attract a significant usage of capital. These pressures should be put in the context that due to several factors, including a low interest rate environment and a slowing of trading volumes, large banks are currently achieving a return on equity of only 7 to 10% and even the two “pure play” large US custodian banks achieved an average return on common equity of only 8.1% in Q1 2012.

As part of the Basel 3 requirement, custody activity and in particular clearing activity will require more capital allocation but to a much lesser extent than traditional investment banking and trading activity. In addition, banks will have to comply with a new liquidity ratio, requiring them to hold significant liquid assets and/or having access to liquidity sources. Custody servicing in this respect is very valuable as it provides access to large pools of liquidity sources through client cash deposits, for example.

Finally, to reduce their risk-weighted assets, financial transactions will be more secured through collateralization. Custodians have traditionally developed effective and optimized collateral management services that can be both an asset for their clients and for the bank itself in the context of potential shortage of good collateral.

Further implications for custodians include:

- the need to exit products or locations in order to reduce risk exposures and hence capital requirements (especially under AIFMD and the corresponding CRD IV capital requirements);
- the need to increase charges to clients to pass the additional cost of capital in particular on the clearing business;
- the provision of daily funding by the custodian for the rest of the bank will continue to be an attractive aspect of custody;
- most sectors are affected – particularly weaker institutions;
- secured lending will grow materially but there are limiting factors.

Banks will be forced to assess which business they wish to continue to occupy. In addition to the absolute capital requirement, the return on equity and the access to liquidity source will be key decision criteria. This may result in potential additional business exits for those lacking economies of scale, and hence this may generate further industry consolidation.

**Ring-fencing of commercial and retail banking**

Apart from Basle 3, moves are being made in the UK (Vickers) and the USA (Volcker) to separate retail banking from other types of banking, notably investment
banking, in order to protect retail depositors from volatile returns in other areas of banking.

The UK method is set out in the Vickers’ report, the executive summary of which states that domestic retail banking services should be ring-fenced, with global wholesale/investment banking outside the fence, and the provision of straightforward banking services to large domestic non-financial companies either in or out.

The US Volcker rule will restrict US banks from making certain kinds of speculative investments that do not benefit their customers. The rule is effectively a ban on most proprietary trading by commercial banks: a number of exceptions to this ban exist in the Dodd-Frank Act, however. The Fed has issued a statement indicating that a “good faith” implementation must be done by the end of 2014, and many lawyers are advising their bank customers that this allows them to delay full implementation until then.

In both cases, custody is expected to be treated as a service outside core retail banking operations. The effect is probably more severe in the UK than in the USA. Vickers proposes that capital levels should be higher for activities outside the ring-fence, a distinct disadvantage to custodians, but as noted the final configuration of new regulation in the US is not known.

Potentially, custodians will not have access to as wide a range of deposit products as at present and may incur higher funding costs. In addition, payment and cash management systems will in most cases be retained within the retail bank, and these retentions will need to be separated from custody. In the future, custodians may need to pay 3rd party fees for payment and cash management services.

In continental Europe, Michel Barnier has mandated formation of a group chaired by Erkki Liikanen, Governor of the Bank of Finland, and previously a European Commissioner. Measures to be considered include “prohibiting banks from carrying out some activities or requiring banks to put certain activities (e.g., taking deposits from retail customers) into separate legal entities”. The group is expected to report after the 2012 summer break.

Furthermore, the move to separate retail banking will limit custodians' ability to affordably develop prime custody and other cross-banking activities. However, custodians, by nature of their business, also generate significant demand account and time deposit balances which will be more highly valued by a commercial bank operating without a retail banking platform.

The final outcome of the potential revision of the banking model and new restrictions to combined activities is very uncertain at this stage. Clarity on potential trends should emerge by the end of the year.

**OTC derivatives new regulatory framework**

At the international level, the G-20 leaders have agreed that all standardized OTC derivatives should be cleared into CCPs and executed on multilateral platforms if possible, and transactions should be reported to trade repositories. In each jurisdiction regulatory initiatives are taking place to achieve this objective. This is the case in the US with the Dodd Frank Act and with EMIR and MIFID in Europe and initiatives are also taking place in Asia.
Those regulatory initiatives will create a complete new framework for OTC derivatives and will impose significant constraints for both the sell side and the buy side. Clearers and custodians in this context see in fact their respective role reinforced in the value chain. Indeed regulators at international levels are pushing towards greater use of infrastructures to limit counterparty risk and increase transparency. However, to manage and limit systemic risk, they are looking to introduce a systematic tiered market organization where banks and financial intermediaries should continue to provide a risk absorbing buffer.

More generally this new OTC derivatives regulatory framework creates new opportunities for clearers and custodian to develop services or deepen existing services to assist their clients in facing those new challenges.

**Outsourcing services**: Compliance with mandatory CCP clearing and reporting to trade repositories for OTC derivatives creates significant operational complexity that buy side clients may have difficulty coping with as well as increase cost (both in terms of operational/IT and collateral costs). The general environment and the massive compliance costs due to this wave of regulation will cause all actors to reduce costs and many will be more willing to outsource functions that provide little or no proprietary advantage. Such outsourcing services should be attractive to second-tier brokers/banks lacking scale and efficient operating systems -- and perhaps to some larger firms as well—and to all the buy side clients that will have to comply with this new OTC market organization. Buy-side firms may in addition accelerate an earlier trend to outsource middle office services to custodians.

**Collateral optimization and transformation**: The transition of OTC derivatives to clearing will create a huge demand for high quality collateral that can be pledged to CCPs. Intermediaries may extend new services to meet this need by providing enhanced collateral optimization services and collateral transformation where an over-collateralized, lower quality basket of securities owned by a party seeking CCP-eligible collateral is exchanged, with or without a guarantee, for higher quality collateral from a lender. Custodians are best placed to provide those types of services as the clients will not have to move their assets to a 3rd party for collateral exchange and custodian have a global view on clients assets which enables them to optimize it efficiently. Custodians could provide those services either as agent or using their own balance sheet.

**Access to infrastructures**: Since regulators are for systemic reasons promoting a tiered-market organization that would limit direct access to FMIs and notably CCPs to only highly-capitalized intermediaries, this creates opportunities for intermediaries to offer access to those infrastructures.

**T+2**

In Europe, the CSD Regulation adopted on March 7th requires a harmonization of the settlement cycle to a maximum of T+2. Germany currently operates on T+2 while the rest of Europe has a T+3 settlement cycle, and a move to a common standard was adopted in anticipation of T2S (planned to go live in 2015). The driver was purely the need for harmonization; a cost-benefit analysis of the change, however, was not performed.

In the US, DTCC together with SIFMA will conduct a cost benefit analysis regarding a potential move to T+2, T+1, T+0 or T+2 as a stepping zone to T+1. As in Europe, it is generally felt in the US that a move to T+2 would be largely straightforward, but would still need to be carefully managed. However, many market participants doubt the priority of T+2 in the context of all the other changes underway. Also, since there is no harmonization issue in the US, many feel that only a move to T+1 might be more
attractive since it would force a re-engineering of the post trade process and have the potential to dramatically lower costs in return for a sizeable one-time investment. The focus of the analysis and debate will be T+2 and T+1: it is widely believed that T+0 is too ambitious at this time but the industry would benefit from documentation of the steps necessary to reach that settlement cycle. The results of the cost-benefit analysis should be available by early Q4 2012.

Legal Entity Identifier

As the need for regulators to have tools to measure exposure and risks across geographies has grown, the need for consistent and accurate counterparty identification has become crucial. In the US, the Financial Stability Oversight Council, established under Dodd-Frank, issued a statement in 2010 calling for "a universal standard for identifying parties to financial contracts that is established by private industry and other relevant stakeholders through a consensus process." Support for LEIs has also come from the G20 in addition to the Financial Stability Board.

A coalition of international financial industry associations developed a comprehensive set of requirements for the LEI system, and recommended solution providers to regulators in 2011. The recommended LEI solution providers include DTCC (which will lever the capabilities of its Avox subsidiary), SWIFT, ISO and ANNA (a network of 81 local national numbering associations that includes many CSDs).

Any legal entity that enters into a financial transaction will be eligible for an LEI, though no threshold of any type will apply to the issuance of LEIs (e.g., capitalization of legal entity, notional value of transaction). The “financial transaction” predicate includes use in transacting, issuing, reference, and reporting and applies with respect to ultimate parent entities. Other entities such as exchanges, registrars and market infrastructures will obtain LEIs as deemed necessary in the future. Natural persons are excluded from LEI's scope.

The early stages of implementation will begin in 2012. The US CFTC became the first regulator to mandate the use of the LEI in regulatory reporting in June 2012. Under that mandate, dealers executing OTC derivatives transactions in credit default swaps and interest rate swaps with their global counterparties must report those transactions subject to CFTC oversight to Trade Repositories, identifying themselves, their counterparties and the reference entities of the contracts with LEIs. By year-end 2012 it is anticipated that reporting will be expanded to other derivative instruments and some non-derivatives and eventually – in 2013 and beyond, when reporting is fully implemented across all geographies - up to 1.5 million LEIs will be issued. The availability of a free, public, validated LEI database in mid-2012 is viewed as essential to aid the global community in becoming aware of and familiar with LEIs, particularly as they grow in number.

Currently, many codes are used to identify counterparties and issuers – marketplace identifiers, company registration numbers, tax reference IDs and firms' own internal numbering systems. At the outset, the LEI will not necessarily replace these codes. Instead, it will be the authoritative entity identifier for regulatory reporting and will be mapped by firms with reporting obligations (and likely by the reference data vendor community) to existing internal codes. This is a meaningfully cost-effective method of introducing LEI, rather than changing the existing identifiers used in multiple internal business and compliance applications across the industry.

The LEI should be viewed through the lens of facilitating the reporting of OTC exposures to regulators on a consistent basis. Custodians, clearers and the wider financial community will likely implement the LEI by mapping it to existing codes in their
various data bases, and over time as they renew their systems they will embed it directly in their systems.

More extensive information and commentary about LEI is included in Chapter 5 (and related Annexes) of the Working Group 3 Report on Standards and Communication.

**FATCA**

It has been estimated that even with the eased requirements and implementation schedule contained in the February 2012 FATCA regulations (compared to the original 2010 regulations) large foreign financial intermediaries such as banks and brokers will spend many tens of millions dollars each to comply with FATCA. In aggregate these costs may come close to -- or exceed -- the tax revenues collected, estimated by the US Treasury to be $8.7 billion over ten years (an average of $870 million per year). It is doubtful whether these extra FATCA-related costs can be passed onto customers, and intermediaries will seek out other efficiencies to reduce the impact on profitability. To avoid FATCA reporting requirements, many foreign intermediaries may decide to not maintain accounts for US persons, which in turn may limit the availability of banking and brokerage services for US persons working overseas.

To keep their QI status and to avoid facing a 30% FATCA withholding on US-source income paid to them on or after January 1, 2014, foreign financial institutions, including intermediaries such as custodians, must enter into an agreement with the IRS by June 30, 2013 and become a “PFFI”, or get an exemption from the IRS.

FFIs that are resident in countries that have entered into government-to-government agreements with the IRS will not be required to sign a separate agreement with the IRS (but might be required to register with the IRS). These FFIs would be identified as "participating" or "deemed compliant" FFIs. Obligations of these PFFIs under such partnership arrangements are still to be defined by the respective governments.

**FATCA will impose the following significant responsibilities on Financial Market Intermediaries.**

1) **Due diligence procedures**

Under proposed regulations, PFFIs must perform required due diligence steps on all financial accounts in order to identify US persons. Different due diligence steps apply to individual accounts as compared to entity accounts.

The due diligence steps must be certified by the Chief Compliance Officer (or equivalent "Responsible Officer") of the PFFI. The Responsible Officer must also certify that written policies were in place as of the date of the Agreement that prohibit advising US account holders to avoid identification.

2) **Reporting**

PFFIs are also required to report account and activity information related to certain US accounts as well as aggregate numbers on accounts held by non-compliant accounts. The proposed rules phase in the information that is required to be reported over a 3-year period, with a first reporting in September 2014.

3) **Withholding**

Under the provisions applicable to a PPFI agreement, FFIs wishing to become a PFFI agree to withhold and pay over to the IRS 30 percent of any payments of U.S.
source income -- or gross proceeds from the sale of securities that generate U.S. source income -- when made to:

(a) non-participating FFIs;
(b) individual and entity account holders failing to provide sufficient information to determine whether or not they are a U.S. person; or
(c) foreign entity account holders failing to provide sufficient information about the identity of its substantial U.S. owners.

Payments of U.S. source income are not limited to payments related to US issued securities. They also cover passthru payments by non-US financial entities (FFIs). The proposed regulations provide that withholding will not be required with respect to those foreign passthru payments before January 1, 2017.

4) Election to be withheld upon

Under the proposed regulations, FFIs that are Qualified Intermediaries (QI) with Primary withholding responsibility (i.e. withholding agents) will be required to withhold on payments made to participating FFIs that have elected to be withheld based on the information provided by such FFIs. Conversely, an FFI that is a QI and does not want to make use of such election will be required to assume primary withholding responsibility under QI rules.

Appendix A provides greater detail on FATCA and the requirements placed both on intermediaries and FMIs.

Solvency II

Solvency II (S2) is the "Basel 2 for the insurance world" in Europe -- setting capital controls on insurers' leverage and liquidity; and dictating new risk and governance requirements. Although this initiative is very advanced in Europe, some discussions at international level are also taking place -- in particular in the context of defining insurance companies which are Systemically Important Financial Institutions (SIFIs).

In Europe insurance firms are currently testing their insurance models, and asset managers within insurance firms are being asked to populate greater amounts of data fields to feed the new modeling tools. Service providers such as the fund administration arms of custodians will need to provide greater levels of information to support their insurer-linked asset manager clients. All European insurers and their subsidiaries will be subject to S2 requirements from 2014.

There are three pillars of S2 Application: risk quantification; risk management; and risk communication.

Timelines regarding S2 and its implementation:

- Omnibus 2 Directive finalized: 2012
- S2 level 2: 2012
- National transposition of Brussels legislation: Jan 2013
- Applicable to firms: Jan 2014
- Solvency I remains in force until Jan 2014

Increased asset data requirements for S2 include: market value, duration, credit rating, structured or not for look through purposes, a definition of 'cash' etc. High quality data is essential for modeling.
More detail is still needed from the European Insurance and Occupational Pension Authority ("EIOPA") on some of the data requirements. They have stated that policy on internal models still depends on Omnibus 2, S2 Level 2 and regulatory technical standards. EIOPA's aims in managing S2 are, notably: foster convergence; clear communication; level 3 guidelines on process, tests & standards, functioning of "colleges of supervisors"; meetings & training for supervisors; FAQs database; peer review by supervisors; and binding mediation among supervisors as a last resort around internal models.

Current EIOPA activities include: advice to the Commission on equivalence of S2 with non-EU countries, notably Bermuda, Switzerland and Japan; consultation on harmonized reporting templates; and consultation on Own Risk and Solvency Assessment (ORSA).

Fund administrators will need to provide data for insurance clients (and their asset managers) that outsource to them, in order to send the regulators the more detailed and frequent reporting of assets specified by S2. Concerns are the short implementation timetable and the potential cost of obtaining price data from outside vendors.

Administrators’ interfaces and functional requirements for insurance clients include the items noted in the footnote below.5

**Omnibus 2**

An S2-related issue is Omnibus 2, an enabling Directive with considerable impact on the timing and implementation of S2. Omnibus 2 also gives new powers to EIOPA. Pension funds may have to keep higher levels of capital, but the pensions industry has been resisting the application of S2 to defined benefit schemes as pension schemes have more predictable liability flows than insurance companies.

---

5 Interface requirements: assets and valuations; receipt of derivative contract information; collateral information; stock lending information; country of custody; market data (e.g. Bloomberg) to enrich information extracted from other source systems with market data; development of client portals to accommodate S2; and direct feeds to clients, sending files on a monthly/quarterly/annual basis.

Administrators’ functional requirements for insurance clients include: translation of incoming data encompassing, assets, valuations and market data, including linking data from multiple sources where there could be little or no cross referencing (a substantial task); providing outgoing data to clients on a monthly/quarterly/annual basis; data storage supporting the requirements for a repository to hold data both current and historical against the defined data model, as well as the loading, transformation and matching of the data according to the defined data model; workflow engine, enabling automation and helping to facilitate timely processing of data; revised processes to drive compliance and to help ensure that exceptions are managed and handled according to the predefined criteria; data distribution options, including the ability to send data to clients in CSV and XBRL formats; audit trail of changes and ‘four-eyes’ compliance requirement; and archiving capability.
Summary of Regulatory Changes Impacting Financial Intermediaries

**Banking Rules**
- Impact on IT and adaptation costs
- MIFID: custody as investment service
- T+2
- New settlement discipline framework
- LEI

**Conflict of Interest Rules**
- Impact on service portfolio
- MIFID: ban on inducements
- AIFM constraints on combined depositary and prime brokerage services
- Vickers and Volcker: constraints between custody services and

**Tax**
- Impact on IT costs
- FATCA, FTT
- Impact on profitability of transaction services
  - FTT: cost for P/E, FX swaps...

**Liability**
- Increased liability
  - AIFM, UCITV: restitution obligation
  - SLD, EMIR: Assets segregation
  => Change in services offered (exit countries?) and prices to

**Access to Infrastructure**
- OTC Derivatives (EMIR, DFA)
- FATCA, FTT
  Increased need to access market infrastructures (CCPs, and TR)

**Collateral**
- EMIR - Banking rules: requirement for collateralization of all counterparties risk
  Increased need for collateral optimization and transformation

**Outsourcing**
- MIFID, EMIR
  Increased operational complexity to operate transactions.
  Increased demand for M/O and B/O outsourcing

**CSD**
- Competition
  Impact on level playing field
  - CSDR: CSDs role and services, willing to move up the value chain
  - T2S: removal of local settlement franchise

**Financial Intermediaries Custodians**
- Risk absorber

**Market Regulation**
- Impact on ROE
  - Increased capital requirement
  - SIFIS
  - Resolution plan

**Outsourcing**
- Buy side
5. Analysis of Regulatory Impact of EU/US Initiatives, Global Initiatives, and FATCA on Market Infrastructures

5.1 Regulatory Reforms Related to OTC Derivatives

OTC derivatives - to be cleared as designated

European regulatory changes support moving OTC contracts to exchanges and to central clearing. Under the European Market Infrastructure Regulation ("EMIR"), the European Securities and Markets Authority ("ESMA") will decide which class of derivatives will be made mandatory for clearing and will consider such factors as the degree of standardization, volume, liquidity and the availability of pricing. In the US, the Dodd-Frank legislation requires clearing for swaps accepted by a clearing entity and designated by the Commodity Futures Trading Commission ("CFTC") and the Securities and Exchange Commission ("SEC") as clearable and mandatory execution of cleared swaps on a regulated exchange or a swap execution facility (SEF). These reforms represent an opportunity for FMIs currently engaged in clearing derivative instruments or event for new entrants.

Trade Repositories

EMIR introduces the requirement that OTC derivatives be reported to a trade repository (TR) that is accessible only to regulators and supervisors. Under Dodd-Frank, all non-cleared swaps must be reported to a TR. Trade repositories must ensure that key information about the OTC derivatives market is transparent and available to regulators globally as they work to ensure that systemic risk is identified and minimized.

To lower the cost to the industry, various industry groups organized competitive requests for proposals to establish global trade repositories by asset class. DTCC, frequently in partnership with other industry organizations such as SWIFT, has won mandates across OTC asset classes for the interest rates, equity derivatives, foreign exchange and commodities trade repositories - in addition to its previously-established warehouse for OTC credit derivatives. The OTC credit derivatives, equity derivatives and interest rate trade repositories are live, and the foreign exchange and commodities trade repositories will be launched in 2012.

In addition to these global trade repositories, various regulators and FMIs have announced plans to establish national and regional trade repositories. This is the case for example of Regis-TR, jointly owned by BME – Bolsas y Mercados Españoles and Clearstream. National regulators are also in some countries pushing for national or regional TRs to ensure they have access to the necessary information for their market. However these various initiatives may create fragmentation and multiple reporting adding cost for the industry and preventing regulators to obtain a global picture. Hence where such entities are established, links between global and local repositories should be implemented, so that data need be entered only once and regulators can view exposures not only at the national/regional level but globally.

---

6 The interest rates repository was organized by the International Swaps and Derivatives Association Rates Steering Committee, while the Global FX Division of the Global Financial Markets Association (comprised of The Securities Industry and Financial Markets Association, the Association of Financial Markets in Europe and the Asia Securities Industry and Financial Markets Association) issued the requests for proposal for the FX and Commodities TRs.
Legal Entity Identifier (LEI)

The background to the LEI was previously summarized in section 3.4.b with fuller details provided in the Working Group 3 Report on Standards and Communications.

Today's entity data itself may be collected and stored by market participants and FMIs in multiple databases, including client master files, security master files, systems for customer relationship management, financial analytics, risk management, and more. This means that the LEI ultimately will have to be mapped to a wide range of identifiers and data storage sites – and will necessarily involve internal legacy systems and vendor software and systems. This is a lower-risk and lower-cost approach, and over time as FMI systems are renewed, their systems will integrate the LEI directly into their data bases.

5.2 Global Risk Principles for FMIs

Background

In April 2012 the Committee on Payments and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO) issued a report titled “Principles for Financial Market Infrastructures” together with two related documents -- namely, an assessment methodology (to provide a framework for assessing compliance with the principles) and a disclosure framework (to assist in the FMI’s disclosure of sufficient information so that users, authorities and the public can understand the design and operation of the FMI, users rights and obligations and the fees and risks associated with participating in the infrastructure). (See the foregoing materials at www.bis.org.) The Principles are now issued in final form following an earlier draft issued in March 2011 that has been subject to a public comment period. Comments are still requested on the assessment methodology and disclosure framework by June 15th 2012. The aim of these documents is to create a unified set of principles for payment systems, settlement systems, CSDs, central counterparties and trade repositories, collectively defined in the report as financial market infrastructures, to provide greater consistency in oversight and regulation globally.

The report updates three sets of existing international standards, recommendations and principles and is issued by CPSS-IOSCO as a single set of 24 principles for the regulation of financial market infrastructures. Besides the 24 principles, the report defines five responsibilities for central banks, market regulators and other relevant authorities, in respect of regulation, oversight, disclosure policies, the application of the principles, and cooperation between authorities.

Relevant authorities are required to incorporate the principles and responsibilities in their legal and regulatory framework by the end of 2012, and authorities should incorporate the principles in their activity as soon as possible. FMIs should take swift action to comply.

7 This section draws for its content from a presentation made by the Federal Reserve Bank of New York on July 12, 2011.

8 Core Principles for Systemically Important Payment Systems (2001); Recommendations for Securities Settlement Systems and CSDs; Recommendations for Central Counterparties (2004)
The key objectives of the initiative

Harmonize and strengthen the international standards for FMIs by incorporating experiences from applying the current standards and the recent financial crisis in support of the Financial Stability Board’s initiative to strengthen core financial infrastructures.

Develop a more comprehensive and integrated view of risk and risk management for FMIs by expanding existing concepts and introducing new standards.

Create a set of standards that is actionable by FMIs.

Key changes from existing standards

Proposed standards introduce trade repositories (TRs) as a new category of FMI.

One set of standards will apply to five types of FMIs: systemically important payment systems, central securities depositories (CSDs), securities settlement systems (SSSs), central counterparties (CCPs) and TRs.

Heightened existing requirements in the following areas:

(a) Governance

The roles of directors and management of FMIs must be clearly specified and the Board must contain suitable members with appropriate skills and incentives to fulfill multiple roles. The risk management framework needs to be documented and the overall strategy must reflect the interests of participants and other stakeholders.

(b) Credit risk principles

The FMI should cover fully its credit risk to all participants with a high degree of confidence and CCPs should maintain additional financial resources to address “extreme but plausible market conditions.”

CCPs that are “involved in activities with a more complex risk profile” or are systemically important in multiple jurisdictions “should maintain” credit facilities that cover the default of its two largest participants. All other CCPs should maintain to cover the default of their single largest participant family.

Securities Settlement Systems (SSS) that operate under a deferred net settlement (DNS) convention (i.e., a net settlement mechanism which settles on a net basis at the end of a predefined settlement cycle) in which there is no settlement guarantee, and where participants are exposed to the credit risk of each other, should maintain resources to cover the default of their two largest participant families. Further, any SSS that operates under a DNS convention without a settlement guarantee should maintain for its participants the capacity to measure and monitor their exposure to each other. All other SSS organizations need to retain resources to cover the default of their single largest participant family.
(c) Liquidity risk management principles

The former standard is broadened beyond liquidity needs relating to participants to include other entities, such as settlement banks, nostro agents, custodian banks, liquidity providers and any other entity that may represent liquidity risk to the FMI. The FMI needs to address how potentially uncovered liquidity shortfalls would be allocated and how liquidity resources would be replaced during a market stress event.

CCPs that are “involved in activities with a more complex risk profile” or are systemically important in multiple jurisdictions “should consider” maintaining liquidity resources to cover the default of its two largest participant families. All other CCPs need liquidity resources to cover the default of their single largest participant family.

SSS operators, whether they operate with a deferred net settlement model without a settlement guarantee -- or not -- are required to maintain liquidity resources to cover the default of their single largest participant family.

An FMI should regularly stress test the design and operation of its liquidity arrangements and among other things have the operational capacity to reroute payments on a timely basis, where feasible, in case of problems with a correspondent bank. The FMI should clearly document the sequence of using each type of liquidity resource and regularly test accessing such resources by actively drawing down test amounts from committed credit facilities.

(d) Mitigation of operational risk and links and other interdependencies among FMIs

FMIs need to assess all potential sources of risk arising from link arrangements and manage these on a well-founded basis. CCPs should identify the potential spillover effect of linking to a second CCP that may default, and they should have policies that manage this risk and have resources to cover this in addition to those required for managing participant risk.

(e) Transparency: disclosure rules, key procedures and market data

The disclosure framework issued in support of the transparency principle requires greater disclosure of rules, key procedures and market data. This is intended to enable market participants, authorities and the public to better understand the safety and efficiency of the FMI and more broadly limit systemic risk and foster financial stability and transparency. The disclosure framework is both comprehensive and prescriptive regarding disclosure items that apply to each of the principles.

New principles

(a) Segregation and portability

CCPs are required to have segregation and portability arrangements that protect customer positions and collateral and to maintain such collateral either in individual customer accounts or in omnibus accounts. Participants of a CCP may collect excess collateral beyond
that required by the CCP, and the excess may be held by the participant or their custodian outside of the segregation and portability regime of the CCP.

However, for cash market CCPs operating in certain jurisdictions where the legal regime facilitates segregation and portability by alternative means that offer the same degree of protection, the CCP and relevant authorities should evaluate whether the applicable legal or regulatory framework achieve the same degree of protection and efficiency that the customer would otherwise achieve by the segregation and portability arrangements at the CCP level described by this principle. A detailed footnote (#122) in the report states that in jurisdictions with alternative regimes, pending purchases do not belong to the customer, so no customer trade is entered into the CCP. As a result, participants provide collateral to the CCP on behalf of their customers regardless of whether they are acting on a principle or agent basis, and the CCP is not able to identify positions or possess the assets of its customers.

(b) General business risk

FMIs must monitor and manage their general business risk and hold sufficient liquid net assets funded by equity to cover potential business losses so they can continue operations and services as a going concern in the event those losses materialize. At a minimum, FMIs should hold liquid assets equal to at least six months of operating expenses.

(c) Tiered participation arrangements

FMIs should manage potential risks arising from tiered participation requirements. FMIs should gather information on and monitor their indirect participants from a risk perspective only (the focus is to include indirect participants that are larger than the direct participant they transact through or that represent a significant daily turnover within the system).

5.3 Regulatory Reforms in the EU Applicable to CSDs

CSD Regulation

On 7 March 2012, the European Commission adopted a Proposal for a CSD Regulation (hereafter referred to as "Regulation"), which seeks to deliver:

(i) A harmonized set of market rules relating to settlement periods (which will be standardized at T+2 for all securities), settlement discipline regimes and the form in which securities are held. As a consequence it will have an effect on all intermediaries, not just CSDs and ICSDs.

(ii) A common regulatory regime for all CSDs and ICSDs in Europe. The Regulation sets out the core services that are required to achieve authorization as a CSD, and the permitted ancillary services. Core services are limited to – notary services; central account maintenance services; and settlement services.

The proposed Regulation also states that a CSD (including the ICSDs) shall not provide any banking services. For the ICSDs, and the three domestic CSDs in Europe that currently have a banking licence, this would mean that the securities services (securities accounts) and the banking services...
(in particular the credit provision) would need to be offered by two separate legal entities. However, the Regulation would allow a national regulator to seek derogation from this requirement from the Commission in respect of its local CSD. Should such derogation not be granted, the European CSDs and ICSDs providing banking services would need to restructure.

The Regulation further proposes that:

(a) Issuers are allowed the freedom to issue securities into any CSD in the EU without prejudice to the corporate law under which the securities are constituted.
(b) CSDs are given a "passport" to provide their services throughout the EU without the need for further authorization. This means that CSD groups could consolidate their operations in a much more efficient way or compete via cross-border servicing. Whenever a CSD provides its services in a Member State other than where it is established, the competent authority of the home Member State is mainly responsible for the supervision of the CSD.
(c) Access rights between CSDs and financial market infrastructures, such as CCPs or trading venues, such that a CSD has the right to receive transaction feeds from those infrastructures and conversely will have to grant them access to its securities settlement system on a non-discriminatory basis.
(d) A CSD from a third country can provide services in the EU if it is recognized by European Securities and Markets Authority (ESMA), which will only grant such authority if the third country has an equivalent legal and supervisory framework as the EU.

EU central banks offering CSD services are exempt from the licensing and supervision of the Regulation but are subject to its substantive provisions including prudential rules and provisions on settlement.

CSDs also must play their part (along with others) in settlement discipline under this measure in the context of harmonizing settlement cycles to a new EU wide default cycle of T+2. In general, the measures to address settlement fails and promote settlement discipline include:

(a) A requirement for trading venues to establish a procedure for confirmation of transaction details;
(b) CSD must establish procedures to facilitate timely settlement and promote early settlement, e.g. progressive tariff structure;
(c) Mandatory monitoring tools to identify likely settlement fails;
(d) CSD reports on settlement fails to national authorities and persons with “legitimate interest”;
(e) A penalty mechanism for participants causing settlement fails;
(f) Buy-in transactions to ensure delivery of securities to receiving participant within 4 days (including daily penalties for the failing party and compensation for the receiving party); and
(g) Suspension and disclosure of participants systemically causing fails, with procedures to be established by CSDs, CCPs and trading venues in this regard.

The CSD Regulation proposals will now be discussed by the EU Parliament and the Council of Ministers (and will be subject to many changes) before being finalized, probably in 2013. Implementation of most Articles will be in 2015.
Securities Law Directive (SLD)

The EU Commission is also considering adopting a proposal for a directive that will cover substantive law rules for book-entry securities, including the methods for acquisition and disposal of securities. In addition it may seek to harmonize conflict of law rules for book-entry securities. The provisions of the directive are likely to affect all intermediaries, not just CSDs and ICSDs.

The SLD is not expected to be adopted by the Commission until Q4 2012.

5.4 Target2 Securities (T2S)

Background

T2S is an initiative undertaken by the European Central Bank to deliver a pan-European Securities versus Central Bank Money (CeBM) settlement solution for the Euro and other currencies in Europe. The T2S project seeks to resolve the inefficiencies of the current fragmented market infrastructures in Europe, reduce the cost of settlement domestically and cross-border, and advance the Lisbon Agenda objective of delivering the Single Market in Europe.

Impact on CSDs

By far the biggest impact of T2S will be on the CSDs that outsource to T2S, given the high adaptation cost, T2S fees, the limited decommissioning opportunities, and the pressure on settlement revenues.

(i) Increased competition:

Some CSDs will likely try to position themselves as a single entry point to T2S, seeking to become investor CSDs (intermediaries) for some or all non-home T2S eligible securities. However, few CSDs will likely have the financial capacity and/or expertise to be successful in this respect. Moving up the value chain will also require that they take more risks, which will generate resistance from their shareholders, clients and regulators.

CSDS acting as issuer CSDs only will also suffer from the increased competition with agent/custodians and those CSDs/Global Custodians that successfully position themselves as an investor CSD.

(ii) High investment cost:

The combination of T2S, regulatory change and broader harmonization of non-settlement activity will put considerable pressure on CSDs to make significant investments over the coming years. This is likely to result in an increase in overall cost. This may not just have an impact on settlement fees but also on the cost of other services offered by CSDs.

One outcome is that a number of the smaller CSDs in Europe will be unable to keep up with such change, resulting in further consolidation of CSDs in Europe.

(iii) Need for harmonization:

The long-term vision of a single, integrated central bank money (CeBM) settlement platform with corresponding promised benefits in terms of cost
reduction may sound credible. It does, however, require more than just a technical platform such as T2S to deliver these benefits. Indeed, significant harmonization and consolidation of non-settlement processing is required as a foundation for reaping the potential benefits of T2S.

As a worst case scenario, if harmonization is blocked - whether on sovereign grounds, due to inadequate legislation, or because of a failure of general will to progress the kind of harmonization needed to create a Single Market in Europe - T2S could become an additional cost to the market. It will save anyway future numerous adaptation costs as the various settlement systems of each European CSD should not be maintained. However, it is essential that all efforts be made to ensure harmonization is a success.

5.5 Foreign Account Tax Compliance Act (FATCA)

Impact on (I)CSDs

Non-US (I)CSDs are considered foreign financial institutions under FATCA and are subject to the same FATCA requirements as previously outlined for intermediaries and the more detailed provisions contained Appendix C. Withholding under FATCA is the obligation of the payor; so, US based FMIs such as DTCC are also covered by this regulation, though mainly in their capacity as US withholding agents.

FMIs are currently studying the impact of FATCA and many have retained outside advisors to assist in the review. This will add to the expense of the FMIs but the absolute cost will be less than for many intermediaries, such as global banks, that have a more diverse client base and operate globally.

Need for (I)CSDs to become participating financial institutions (PFFIs)

Under FATCA, (I)CSDs are considered foreign financial institutions (FFI). To keep their QI status when applicable, and to avoid facing a 30% FATCA withholding on US-source income paid to them on or after January 1, 2014, (I)CSDs must enter into an agreement with the IRS by June 30, 2013 and become a “PFFI”, or they must get an exemption from the IRS.

(I)CSDs that are resident in countries that have entered into government-to-government agreements with the IRS will not be required to sign a separate agreement with the IRS (but might be required to register with the IRS). These (I)CSDs would be identified as “participating” FFIs by virtue of being “deemed compliant” FFIs. Obligations of the (I)CSDs under such partnership arrangements are still to be defined by the respective governments.

Due diligence considerations for (I)CSDs

For those (I)CSDs that have numerous existing individual accounts with assets exceeding $50,000 (e.g. Euroclear Sweden, Euroclear Finland reflect accounts at the beneficial owner level), due diligence procedures are very cumbersome and will require CSDs to review all electronic information (a paper search is required for accounts exceeding $1 million) collected under their existing account opening procedures to determine whether the account holder has "US indicia".

For (I) CSDs that do not have individual accounts, due diligence steps still need to be performed in relation to all entity accounts, although "lighter" steps apply. CSDs need not conduct due diligence on preexisting entity accounts with balances of $250,000 or less (determined by aggregating all accounts held by the entity at the CSD and its
affiliates) until the account balance exceeds $1 million. For other preexisting accounts, the CSD can rely on its KYC/AML records to determine whether the account holder is a U.S. person for up to one year for prima facie CSDs and for up to 2 years for all other entity accounts. If the account balance is $1 million or less, the CSD can rely on its records to determine whether the entity has substantial U.S. owners. If the account balance exceeds $1 million, the CSD must make an independent search to determine whether the entity has U.S. owners or must obtain certification from the entity that it does not have substantial U.S. owners.

Summary of Regulatory Changes Impacting FMIs

Increased Product Scope
- Increased opportunity and investment
- Shift of OTC derivatives to clearing
- Trade Repositories
- LEI

Increased Regulatory Requirements
- Increased compliance and investment
  - CPSS-IOSCO Principles for FMIs
  - EU regulatory reforms for CSDs
  - FSB guidelines for TRs and LEI

Service Portfolio
- Centralize and mutualize risk
  - Take on risk currently managed bi-laterally
  - Mutualize risk to reduce industry costs

Market Rules/Tax
- Update services for market and tax changes
  - T+2
  - FATCA
  - Settlement Discipline

Financial Market Infrastructures

CSD Access and Competitive Services
- Provide pan-European CSD access and asset servicing

Collateral
- Opportunity in collateral optimization and transformation

Outsourcing
- Opportunity with sell side

Trade Repositories/LEI
- Global/regional/national repositories

Participants
6. Concluding Notes and Open Questions

The array of new regulations will no doubt shape some market evolutions, including industry practices and lines of business. At least a few general predictive observations seem possible even at this stage, but with these predictions come some longer-term questions concerning the economic allocation of impacts and the ways in which opportunities are accommodated.

Financial Intermediaries will be expected to absorb even more risk in the chain, as regulations and policies seek to remove a range of risks from investors and expand intermediaries' role in servicing more buy-side actors, including shadow banking actors. Approaches – uncertain at this stage, but critical – will have to emerge to ensure proper compensation for the shift in risks to intermediaries. Will buy side actors be ready to pay the risk-shift premium, and which actors will remain in which products and markets? If risk is not priced properly, it can become a source of future crisis.

Market Infrastructures appear overall to be positioned in roles that new regulation reinforces, albeit some changes such as T2S require CSD dexterity. Criteria for successful evolution – also uncertain at this stage – will no doubt emerge. Which of the existing entities will see gains in functionality and market position, and which will see a diminished role?

In the new Market Environment, how will costs be optimized across the chain of players? What will be the right balance between risks/costs? And what role will Market Infrastructure play in contributing to the optimization equation? In ten years time, where will the dividing line be between Market Infrastructure servicing and Financial Intermediary servicing?

Main benefits to be derived by Financial Intermediaries and Financial Market Infrastructures (= the ISSA core constituency):

- Dematerialization and uniform buy-in procedures mandated by the European CSD legislation.

- Settlement cycle of T+2, again mandated by the European CSD legislation. This has the potential to develop into a global standard, thus offering the opportunity to arrive again at a globally consistent cycle across all capital market instruments.

- Increased transparency, particularly in the OTC derivatives markets, offering the possibility to verify positions and valuations from a centralized/neutral source.

- Demand for expanded central clearing as well as interconnectivity between Central Counterparties will on the one hand call for increased amounts of collateral, and on the other hand will provide additional business opportunities in collateral movement and administration functions for settlement and custody providers.

Main areas calling for increased allocation of costs and resources by Financial Intermediaries and Financial Market Infrastructures. It is likely that a significant portion of such cost will ultimately have to be borne by the end investor.

- Tax initiatives, such as FATCA or a Financial Transaction Tax, triggering increased due diligence, documentation and process responsibilities throughout the intermediary chain, will absorb significant resources.
• Designating custody services as full investment services under the new MiFID 2 regulation bears the risk that custodians could be made liable for “failures of investor protection”, particularly in cases of purely administrative activities such as processing a corporate actions transaction on behalf of the investor.

• Enlarging custodian/depositary liability on portfolios held by Alternative Investment Funds and UCITS funds, which calls for ready custodian restitution of lost assets, including some losses attributable to third parties may prompt custody providers to limit their offerings or increase their prices in order to be compensated for augmented due diligence endeavors and/or capital underpinnings.

**Challenges for Regulators and Industry at large:**

• Potential for regulatory arbitrage, e.g. in case of a Financial Transaction Tax implemented only in a particular region or in some countries.

• T2S will require CSDs to find new sources of income and move up the value chain, yet the CSD Regulation seeks to limit their scope to bare utility services.

• Finding the right balance in terms of regulation that will be effective while rewarding investments that lead to efficiency measures, such as harmonization and standardization, will in the end offer the opportunity to reduce inherent operational risk.
# Annex A

## Working Group 1 Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Florence Fontan (WG Chair)</td>
<td>BNP Paribas Securities Services</td>
</tr>
<tr>
<td>Mr. Neil T. Henderson</td>
<td>DTCC</td>
</tr>
<tr>
<td>Mr. Jong-Hyung Lee</td>
<td>Korea Securities Depository</td>
</tr>
<tr>
<td>Mr. Henry Raschen</td>
<td>HSBC</td>
</tr>
<tr>
<td>Mr. Urs Staehli</td>
<td>UBS</td>
</tr>
<tr>
<td>Mr. Bruce Treff</td>
<td>Citi</td>
</tr>
<tr>
<td>Mr. Ionnis Tzouganato</td>
<td>Citi</td>
</tr>
<tr>
<td>Mr. Jo van de Velde</td>
<td>Euroclear</td>
</tr>
<tr>
<td>Mr. Richard Young</td>
<td>SWIFT</td>
</tr>
</tbody>
</table>
Regulatory Initiatives in the Americas Beyond the US

The focus of this report has been on regulatory changes will affect the US and Europe, and the working group did not conduct extensive research on other markets. Regulatory changes including global initiatives will, of course, affect all markets in the Americas and elsewhere.

The following text provides an update on certain of the most notable regulatory and market changes affecting two significant markets in the Americas -- Brazil and Canada. These summaries are not intended to be comprehensive statements covering all regulatory and other changes impacting these markets.

1. Brazil

**Transparency in the Derivatives Brazilian Market**

From a regulatory perspective, capital and derivatives markets in Brazil present a generally sound environment. Most of the regulatory changes that have been addressed in US (Dodd-Frank Act) and Europe have already been in course in Brazil for a long time. First, the Brazilian exchange model is the final beneficiary owner, meaning that the exchange, the clearing house (which belongs to the Exchange) and the regulators all know exactly the final owner of the positions in the market.

Additionally, all derivatives transactions must be registered on an authorized system repository. Currently, the available repositories are both the BM&FBOVESPA exchange, which offers an OTC system with an option for clearing services (using the same Clearing House from the Exchange), and CETIP. This means that no derivatives transactions are made without the scrutiny of the Brazilian regulators, including the Central Bank.

Besides the scrutiny of regulators with regards to all derivatives transactions, a partnership including Brazilian Bank Federation (FEBRABAN), Brazilian Central Bank, BM&FBOVESPA exchange and CETIP has created a Derivatives Exposure Data Warehouse (CED, from Central de Exposição de Derivativos). The main goal of the venture is to provide a data base where banks can check the exposure as well as the leverage levels on derivatives market of its clients by receiving information about net positions in both CETIP and BM&FBOVESPA. In fact, the clients are required to authorize their positions to be available for monitoring through CED.

**Four Clearing Houses following Merger of Local Exchanges**

The BM&FBOVESPA exchange is the product of the merger of the two major Brazilian derivatives and equity exchanges BM&F and BOVESPA, respectively. In spite of the merger of the two exchanges, there are still four fully independent clearing houses: financial and commodities derivatives, a CSD (for custody and clearing on both spot and derivatives), public fixed income and FX spot market. The Exchange is aiming to be able to offer in 2013 post-trading services in a single platform that can communicate with the different trading systems.

**Hard Time for New Players on Exchange Business**

The merger between the former derivatives and equities exchanges BM&F and BOVESPA has created a known monopoly within the Exchange industry in Brazil. Although the exchanges are not used to seeing each other as direct competitors, they both had foreseen that the wave of exchanges mergers worldwide could be a threat to Brazilian Exchanges.
Moreover, the new exchange, BM&BOVESPA, has a quite particular business model in which both trading and post-trading services (custody, settlement and clearing) are provided to final investors by a single company. Such a business model creates a significant obstacle for external players who seek to launch alternative trading platforms in Brazil, such as Bats and Direct Edge. In order to succeed in the Brazilian market, they will need to be able to provide the clearing services either from scratch, which presents a huge initial investment, or through outsourcing to BM&FBOVESPA Equity Clearing House. The exchange has already announced to the market they do not have any current interest in such a partnership due to the amount of energy and effort necessary to deploying the ‘super clearing house’ project, which eventually will merge the four clearing houses.

Obviously, unless there is a regulatory obligation, not fully clear for the market, BM&FBOVESPA exchange does not intend to provide post-trading services for a competitor.

2. Canada

Market consolidation

Canada’s capital markets are facing unprecedented change in 2012 with the proposed acquisitions of two major domestic stock exchanges (Toronto Stock Exchange and Alpha Exchange Inc.) and the central securities depository (The Canadian Depository for Securities Limited) by the Maple Group Acquisition Corporation (“Maple”). In order for the proposed acquisitions to proceed, several regulatory hurdles must be cleared, including approvals by the Competition Bureau, several provincial securities commissions, and the Bank of Canada. Most recently in connection with the acquisitions, the Ontario Securities Commission and the Québec Autorité des marchés financiers have published proposed regulatory orders that would apply to Maple and the acquired entities.9

OTC Derivatives

In alignment with the G-20 approach to rectifying shortcomings in the OTC derivatives marketplace, Canada is assessing its regulatory framework approach through a series of consultation papers issued by the Canadian Securities Administrators.10 It is expected that legislative enactments and amendments, regulations, and rules will be undertaken by the various provincial authorities to address the areas covered by the consultation papers.

Ownership of Securities Market Regulation

The past few years have seen an increased tension between the federal and provincial governments in terms of securities market regulation. While the power to regulate the securities markets in Canada resides with the provinces, this has not gone unchallenged. The federal government, via the Canadian Securities Transition Office (CSTO), tabled a proposed Securities Act with the view to create a national securities regulator. The proposed Securities Act was held to be unconstitutional by various


provincial courts of appeal and ultimately the federal government referred the statute to the Supreme Court of Canada for a finding on constitutionality.

In late 2011, in the Supreme Court of Canada found that the proposed Securities Act was unconstitutional. The federal government has taken some solace from the court’s opinion that while day-to-day regulation of the securities markets falls squarely within the domain of the provinces, there is a potential for national oversight of systemic risk and the establishment of common standards. The federal government, via the CSTO, is currently in discussions with several provinces in an effort to create a national regulator for such purposes. The CSTO has received funding for an additional year.

**Dodd-Frank**

For those Canadian participants with U.S. operations or activity, adherence to the requirements in Dodd-Frank legislation is a necessity. However, no comparable laws have been drafted in Canada. Canada appears to be taking more of a wait-and-see approach with a firm desire to avoid unintended consequences.

**FATCA**

FATCA is a U.S. response to the challenge of getting a handle on U.S. tax leakage through offshore accounts. Canadian participants having accounts belonging to U.S. entities (i.e., citizens or companies) will be affected by this legislation. There does not seem to be a move to create similar regulation in Canada. Rather, there is continued reliance on existing law in this area.
**FATCA Regulations-February 8th 2012**

**Background**

The information below provides a high-level overview of the provisions and requirements of FATCA, including penalty provisions and compliance points.

The Foreign Account Compliance Act (FATCA) was enacted by the US Congress in 2010 to catch US nationals that had undeclared overseas accounts and thereby avoiding US taxes on income and capital gains. The U.S. Treasury has estimated that FATCA will increase US tax receipts by $8 billion over 10 years.

The legislation immediately was met with a barrage of criticism as being over-reaching, forcing foreign financial institutions (FFIs) to become collection agents for the US Treasury and posing excessive compliance costs. It had been estimated that compliance cost for large global financial institutions might be as high as $170 to $200 million each. The legislation was also criticized as violative of the secrecy laws of many countries since it required reporting of data on US nationals who hold accounts in such jurisdictions.

FATCA encourages: (i) FFIs to sign agreements to report information on their U.S. account holders to the IRS and (ii) other foreign entities to provide information regarding their beneficial owners to U.S. withholding agents, including Participating FFIs. If entities do not comply, FATCA requires withholding agents to collect a 30% withholding tax not only on payments of U.S. source income but also on principal and gross proceeds from sales of instruments that would produce US source dividends and interest made to these entities. The legislation included real teeth to deal with non-compliance, by requiring Participating FFIs to withhold on "passthru payments" made to "recalcitrant account holders" and to FFIs that do not sign an FFI agreement with the IRS. Some critics argued that these provisions would result in foreign investors shunning US investments, thereby triggering a massive outflow from the US economy.

**FATCA Regulations**

Heeding this criticism, on February 8, 2012, Treasury and the IRS issued long-awaited proposed regulations under the Foreign Account Tax Compliance Act (FATCA) which eased the provisions of the Act in several ways. The proposed regulations will reduce FATCA implementation costs by $10 billion, according to KPMG, though FATCA will still cost the industry much more than it is likely to raise as revenue for the IRS. Some of the most notable proposals are:

(i) Expanded scope of the grandfathered obligations: Withholdable payments and passthru payments would exclude any obligation having a maturity date that is outstanding as of January 1st 2013;

(ii) Modification of the due diligence procedures for the identification of accounts: Preexisting individual accounts under $50,000 would be excluded from FATCA and the required manual review of paper records would be limited to accounts over $1 million; Preexisting entity accounts of $250,000 or less would be excluded and procedures to identify the FATCA status would be simplified;

(iii) Delay for Group compliance where local laws prohibit compliance: Where local secrecy laws prohibit the disclosure of account identities, a two year transition to compliance by Jan 1st 2016 is allowed under certain conditions;

(iv) Phased-in reporting: Reporting is to be phased in, beginning in 2014 for account identification, 2016 for income and 2017 for gross proceeds;
(v) Delay in withholding on foreign passthru payments: Withholding on such payments is not required until January 1st 2017;

(vi) Additional categories of “deemed compliant” FFIs: The proposed regulations specify three categories of deemed compliant FFIs:

- Registered Deemed Compliant FFIs. These FFIs register with the IRS to establish their exemption.
- Certified Deemed Compliant FFIs. These FFIs certify to withholding agents that they are deemed compliant.
- An Owner-Documented FFI will be required to provide its designated withholding agent with all due diligence documentation required under the Proposed Regulations, and the withholding agent will need to agree to report to the IRS all information required to be reported under the Proposed Regulations on behalf of the Owner-Documented FFI.

**Government to Government Agreement**

Simultaneously with the release of the proposed regulations, the US Treasury issued a joint statement with the governments of five countries—France, Germany, Italy, Spain and the United Kingdom. Under reciprocal arrangements, FFIs located in those countries will report required information to their national authorities, which in turn will forward the data to the US Treasury under existing tax treaties or information exchange programs. Similarly, the United States would reciprocate by collecting and exchanging information on accounts held in U.S. financial institutions by residents of these countries. It is expected that several additional countries will make similar arrangements, and the governments of Ireland and Luxembourg have already expressed support for an inter-government agreement. The securities industry is also supportive of such arrangements provided such arrangements are communicated quickly and are standardized across countries. The European Fund and Asset Administration Association (EFAMA) has called on the US government to extend this arrangement to additional jurisdictions.

FFIs that are resident in countries that have entered into government-to-government agreements with the IRS will receive exemption from certain of the direct provisions of the FATCA rules. These FFIs, for example, will not be required to enter into an FFI agreement with the IRS. There will not be any FATCA withholding on payments made to FFIs resident in that country. In addition, such FFIs will not be required to close the accounts of recalcitrant account holders and to withhold on passthru payments made to recalcitrant or other FFIs located in a country with which there is a government-to-government reporting.

**Detailed Provisions**

Unless there is a government-to-government agreement, FATCA requires FFIs to report directly to the IRS certain information about financial accounts held by U.S. taxpayers, or by foreign entities in which U.S. taxpayers hold a substantial ownership interest. To properly comply with these new reporting requirements, an FFI will have to enter into a special agreement with the IRS.

Significantly, while FATCA requirements will be phased in, FFIs may begin to apply to enter into FFI agreements as early as January 1, 2013, and some withholding requirements will begin as early as January 1, 2014. Although the proposed regulations do not provide a form of FFI agreement, the U.S. Treasury stated that it intends to finalize the form of the FFI agreement by January 1, 2013, and that FFIs should register and enter into FFI agreements by June 30, 2013, in order to be timely identified as participating FFIs. Thus, in order to avoid withholding commencing on January 1, 2014,
certain due diligence procedures imposed by FATCA will need to be in place for many financial institutions on or before June 30, 2013.

**Under this agreement a “participating” FFI (“PFFI”) will be obligated to:**

a) Withhold on passthru payments made to NPFFIs and recalcitrant account holders as from beginning in 2014;
b) Obtain information on account holders to the extent necessary to determine which accounts are U.S., recalcitrant and NPFFI accounts;
c) Annually report to the IRS on U.S. and recalcitrant accounts;
d) Obtain a waiver of non-U.S. law that would impede FATCA reporting;
e) Adopt written policies and procedures governing the due diligence procedure;
f) Conduct periodic reviews of its compliance procedures;
g) Certify compliance to the IRS; and
h) Respond to IRS requests for information

FFIs that do not enter into an agreement with the IRS will be subject to withholding on certain types of payments, including U.S. source interest and dividends, gross proceeds from the disposition of U.S. securities, and passthru payments. The Act is effective for “withholdable payments” made after December 31, 2013 and “pass-thru payments” made after December 31, 2014. The proposed regulations provided relief by excluding from the definition of withholdable or passthru payment any payment made under an obligation outstanding on January 1, 2013. It also provided that withholding will not be required with respect to “foreign” passthru payments before January 1, 2017.

**Transitional Rules for Certain FFIs**

The proposed FATCA regulations will allow two additional years -- until January 1, 2016 -- for all members of an expanded affiliated group to become a PFFI where there are local law prohibitions on the ability to become FATCA-compliant. In order to take advantage of this rule, FFIs that are not subject to the local law limitation must comply with the FATCA due diligence, reporting and withholding requirements; and group FFIs that are subject to reporting restrictions must nonetheless comply with due diligence requirements and meet certain other requirements.

**"Deemed Compliant“ FFIs**

The proposed FATCA regulations expand the categories of “deemed compliant” FFIs, i.e. those FFIs that are treated as FATCA-compliant even though they are not required to conduct due diligence or report information on U.S. accounts to the IRS. The proposed regulations specify three categories of deemed compliant FFIs:

- **Registered Deemed Compliant FFIs.** These FFIs register with the IRS to establish their exemption. Such entities include local banks (more than 98% of accounts held by residents) without a place of business outside of their country of organization, FFI affiliates that do not maintain U.S. accounts, qualified collective investment vehicles (investment vehicles regulated in its country of formation as an investment fund) and restricted funds (funds that cannot sell interests to U.S. persons). A registered deemed-compliant FFI may use agents to ensure that they meet the necessary requirements.

- **Certified Deemed Compliant FFIs.** These FFIs certify to withholding agents that they are deemed compliant. They include non-U.S. local banks that are not Registered Deemed Compliant FFIs having assets of less than $175 million; a non-U.S. retirement fund or non-profit organization; and FFIs with only low value accounts and less than $50 million in assets.
• Owner-Documented FFIs. An FFI that maintains all of its accounts with a designated withholding agent who agrees to undertake additional due diligence generally is treated as a Deemed Compliant FFI with respect to payments received from the designated withholding agent.

The proposed regulations eliminated the heightened scrutiny for accounts that previously fell within the broad definition of “private banking.” Instead of that definitional scope, heightened scrutiny is based solely on a $1 million dollar threshold. The requisite paper search for U.S. indicia for these accounts is also scaled back to include only more recent account data (as opposed to a search of every paper document on file). The proposed rules extend the reliance on existing AML and KYC procedures for pre-existing account identification.

Under the proposed regulations, (I)CSDs must perform required due diligence steps on all financial accounts in order to identify US persons. Different due diligence steps apply to individual versus entity accounts. CSDs having individual accounts must review all information collected under their existing account opening procedures to determine whether the account holder has specified US indicia. Specified US indicia include:

a) Identification of an account holder as a US person;
b) A US place of birth;
c) A US address;
d) A US telephone number;
e) Standing instructions to transfer funds to an account maintained in the United States;
f) A power of attorney or signatory authority granted to a person with a US address; or
g) A US "in-care-of" or "hold mail" address that is the sole address the FFI has identified for the account holder.

(I)CSDs will also be required to review their new account opening procedures.

Withholding

A participating FFI is required to withhold on any passthru payment made to a recalcitrant account holder or a nonparticipating FFI (or a participating FFI that has made an election to be withheld upon) after December 31, 2013. However, the requirements for withholding on “foreign” passthru payments are reserved and withholding will not be required before January 1, 2017.

Under a PFFI agreement, (I)CSDs wishing to become a PFFI agree to withhold and pay over to the IRS 30-percent of any payments of U.S. source income, as well as gross proceeds from the sale of securities that generate U.S. source income, made to: (a) non-participating FFIs; (b) individual and entity accountholders failing to provide sufficient information to determine whether or not they are a U.S. person; or (c) foreign entity accountholders failing to provide sufficient information about the identity of its substantial U.S. owners.

Payments of U.S. source income are not limited to payments related to US-issued securities. They also cover passthru payments by non-US financial entities (FFIs). The proposed regulations provide that withholding will not be required with respect to those foreign passthru payments before January 1, 2017. Although the IRS will provide additional guidance on the treatment of foreign passthru payments at a future date, for 2015 and 2016 PFFIs will be required to report the aggregate amount of certain payments to NPFFIs.
The purpose of the passthru payment rule is to encourage FFIs to enter into PFFI agreements and to prevent PFFIs from being used as a blocker for US persons and non-participating FFIs that could otherwise avoid FATCA withholding on indirect U.S. investment income. A passthru payment paid to a PFFI is not subject to FATCA withholding, whereas a passthru payment paid to a non-PFFI would be subject to FATCA withholding.

**Reporting**

The proposed rules phase in the information that is required to be reported over a period of years. In 2014 and 2015 (for accounts maintained in 2013 and 2014), the information will be limited to name, address, TIN, account number, and account balance information. The following year, any income paid to the account must also be reported. And finally, in 2017, all of the information listed below must be reported to the IRS with respect to US accounts or foreign entities with substantial US ownership:

a) The name, address and US Tax Identification Number of each account holder that is a specified US person;

b) In the case of any account that is a U.S. owned entity, the PFFI must report the name, address and US Tax Identification Number of each U.S. substantial holder;

c) The account number;

d) The year-end account balance or value; and

e) Gross payments and credits to the account.

The IRS also contemplates requesting reporting of certain limited information on recalcitrant accounts.

A participating FFI must report -- in separate groupings -- the aggregate number and aggregate value of recalcitrant accounts at the end of the calendar year that (1) have US indicia, (2) do not have US indicia, and (3) are dormant accounts. This information is required to be filed electronically with the IRS (on a form yet to be published) on or before March 31 of the year following the calendar year that is being reported. A special reporting rule for the 2013 calendar year applies, under which a participating FFI is required to report all US and recalcitrant accounts held as of June 30, 2014, to the IRS on or before September 30, 2014.

**Overview Comparison of Scope of QI Regime with QI/FATCA Regime (the QI regime will not be abandoned by implementation of FATCA)**

Under the current Qualified Intermediary (QI) regime, QIs are required to perform certain withholding and reporting functions for U.S sourced payments made to their U.S. and non-U.S. account holders. The Treasury Department and the IRS intend to require all QIs that are FFIs to become participating FFIs. Therefore, in order for an FFI to renew its QI agreement, an FFI will be required to be a participating FFI. A QI Agreement with original expiration date of December 31, 2012 is automatically extended to December 31, 2013. QIs will be able to retain their status as a QI for a limited period of time (until December 31, 2015) even though the QI cannot comply with the provisions of an FFI agreement. In that case, the QI is treated as a limited FFI and must identify itself to its withholding agents as a nonparticipating FFI.
The following table provides an overview of the existing QI rules and the combination of the QI and the new FATCA rules:

<table>
<thead>
<tr>
<th>Qualified Intermediary (QI)</th>
<th>Participating FFI (PFFI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QI status is purely elective</strong></td>
<td><strong>Conformity rule for Participating FFIs</strong></td>
</tr>
<tr>
<td>Entity with QI Agreement must affirmatively invoke QI status with Form W-8IMY (certifying QI status for identified accounts). If an affiliated group has a QI unit, others may remain NQIs.</td>
<td>PFFI status applies to entity with an FFI Agreement, plus entire expanded affiliated group (unless otherwise provided by Treasury regulations).</td>
</tr>
<tr>
<td><strong>QI duties limited to US source income</strong></td>
<td><strong>Participating FFI’s duties broader for US Accounts</strong></td>
</tr>
<tr>
<td>In general, QI's compliance obligations relate only to accounts receiving US source income (reportable amounts). QI must disclose US persons only if they receive US source income (and possibly non-US source income if paid inside the US).</td>
<td>A PFFI must identify any account defined as a US Account (generally, direct or indirect US owner), including accounts receiving only non-US source income. The PFFI must then report information to IRS for such US Accounts (or close account in case of legal prohibitions to disclose US person).</td>
</tr>
<tr>
<td><strong>Limited withholding on sales proceeds</strong></td>
<td><strong>More frequent withholding on sales proceeds</strong></td>
</tr>
<tr>
<td>30% Backup withholding is required for sales proceeds of US securities only when QI has actual knowledge that the account holder is a US individual (non-exempt recipient) who refuses to be disclosed.</td>
<td>30% FATCA withholding is required from sales proceeds of US securities for NPFFIs, a &quot;recalcitrant&quot; account holder and any NFFE that fails to give required certifications regarding substantial US owners.</td>
</tr>
<tr>
<td><strong>Scope: Only intermediaries, transparent entities</strong></td>
<td><strong>Scope: Includes non-transparent entities</strong></td>
</tr>
<tr>
<td>To have QI status, a financial institution must act as an intermediary (different agreements available for transparent entities: common / simple trusts and partnerships).</td>
<td>FFI status, and the potential need for an IRS agreement, includes non-transparent hedge funds and other investment vehicles (in addition to intermediaries).</td>
</tr>
</tbody>
</table>
The following table sets out select definitions:

<table>
<thead>
<tr>
<th>FATCA Terms</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withholdable Payments</td>
<td>A withholdable payment is any payment of a type ordinarily subject to withholding tax, including interest, dividends, redemptions/maturities and royalties from sources within the United States. It also includes any gross proceeds from the sale of any property that could produce interest or dividends from sources within the United States.</td>
</tr>
<tr>
<td>FFI</td>
<td>An FFI is any foreign entity that:</td>
</tr>
<tr>
<td></td>
<td>• Accepts deposits in the ordinary course of a banking or similar business;</td>
</tr>
<tr>
<td></td>
<td>• As a substantial portion of its business holds financial assets for the account of others; or</td>
</tr>
<tr>
<td></td>
<td>• Is engaged (or is holding itself out as being engaged) primarily in the business of investing, reinvesting, or trading in securities, partnership interests, commodities, or any interest (including a futures or forward contract or option) in such securities, partnership interests, or commodities.</td>
</tr>
<tr>
<td></td>
<td>• Accordingly, the term financial institution may include, among other entities, investment vehicles such as hedge funds and private equity funds.</td>
</tr>
<tr>
<td>PFFI/NPFFI</td>
<td>An FFI that enters into a FFI agreement with the IRS is referred to as a “participating foreign financial institution” (PFFI). An FFI that does not enter into an agreement with the IRS is referred to as a “non-participating foreign financial institution” (NPFFI), and is subject to withholding requirements under FATCA.</td>
</tr>
<tr>
<td>Passthru Payment</td>
<td>A passthru payment is defined as “any withholdable or other payment to the extent it is attributable to a withholdable payment”</td>
</tr>
</tbody>
</table>

**Examples of Withholding on Passthru Payments**

The handling of withholding on passthru payments can be difficult to understand, and the two examples on the following pages should clarify the issues. The first example relates to a dividend on a US issue (IBM in this example) paid to downstream customers who are variously PFFIs or non-PFFIs. The second example relates to how a (foreign) fund of funds would calculate its passthru payment percentage.
Example of Passthru Payment Flow

- US Bank/Broker Dealer
- Participating FFI
- Non-Participating FFI
- US Broker

FATCA requires Participating FFIs to withhold on "passthru" payments made to Nonparticipating FFIs and recalcitrant account holders. The definition of such "passthru" payments is broader than the definition of withholding payments. The Proposed Regulations divide passthru payments into two categories: (i) withholdable payments and (ii) "foreign passthru payments." Withholding on passthru payments that are withholdable payments will begin on January 1, 2014, along with other FATCA withholding. However, no withholding will be required on foreign passthru payments until January 1, 2017, at the earliest.
**Example of Calculation of Passthru Payment Percentage (PPP)**

Fund A is a participating FFI that operates as a fund of funds and that elects the book value (BV) method for determining the value of its assets. As of the relevant testing date, Fund A’s assets consist of an interest in:

- Fund B, a non-participating FFI (BV of USD 20 mio)
- Fund C, a participating FFI with a PPP of 50% (BV of USD 30 mio)
- Fund D, an FFI that does not calculate its PPP (BV of USD 10 mio)
- Fund E, a US domestic corporation (BV of USD 40 mio)

Fund A’s total assets are USD 100 mio. As shown below, its US assets are USD 65 mio. The USD 65 mio represent 65% of Fund A’s total assets leading to a PPP of 65%.

---

**Example derived from IRS Notice 2011-34**