IOSCO'S RESPONSE TO THE FINANCIAL CRISIS

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BY ROBERTA S. KARMEL*

I. INTRODUCTION

The International Organization of Securities Commissions (“IOSCO”) was formed in 1983 from an Inter-American regional association of securities regulators into an international body. It is now an association of securities commissions and main financial regulators from more than one hundred countries that regulate more than ninety percent of the world’s securities markets. IOSCO’s primary role is to promote high standards of securities regulation and to act as a forum for national regulators to cooperate with one another.1

Like other international financial bodies, IOSCO has responded to the financial crisis of 2008. Previously, in response to the Asian financial crisis of 1998, IOSCO developed its Objectives and Principles of Securities Regulation to set out a framework for regulating securities markets, intermediaries, issuers of securities, and matters relating to collective investment schemes.2 Ten years later, IOSCO was persuaded that its Objectives and Principles were not designed to prevent systemic risk and were therefore insufficient. IOSCO thus revised its Objectives and Principles and added eight new Principles, including two that specifically focused on systemic risk.3 IOSCO’s ongoing efforts to support these new Principles are parallel to efforts by other financial regulators to deal with systemic risk. Yet, IOSCO’s efforts focus on somewhat different issues in the capital markets than the issues of interest to bank regulators.

Systemic risk in the securities markets is not primarily about prudential regulation. Rather, it concerns activities by non-banking intermediaries, sometimes referred to as the shadow banking sector,4 transparency and soundness in the capital markets,

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2 IOSCO, OBJECTIVES AND PRINCIPLES OF SECURITIES REGULATION (Sep. 1998).


4 There is little common understanding of what the shadow banking sector is. Some believe it is all of the intermediaries and products that substitute for banking; others would limit the sector to the creation of credit outside of bank credit. The definitions can make a difference. See Zoltan Pozsar et al., SHADOW BANKING, Fed. Res. Bank of N.Y. Staff Report No. 458 (July 2010), available at http://www.newyorkfeds.org/research/staff_reports/sr458.pdf.
trading practices, and risks from market innovations. The risks posed by these
intermediaries are in some ways more subtle and difficult to understand and control
than the risks posed by too-big-to-fail banks. Further, in a number of the areas in which
IOSCO is attempting to set standards, the United States and the European Union have
taken some divergent regulatory paths, and Asian markets may be engaging in
competitive regulatory strategies that pose a threat to established markets in the United
States and Europe.

Part II of this Article will outline IOSCO’s Objectives and Principles and explain
how they were revised in response to the financial crisis of 2008. Part III will discuss
certain key initiatives where a lack of harmonization would be detrimental to effective
regulation. In particular, this Article will focus on the regulation of hedge funds, credit
rating agencies, short selling, and technological innovations, including direct electronic
access, dark pools, and high frequency trading. These topics have been selected
because they are not within the traditional purview of bank regulators and they are
securities regulatory concerns related to systemic risk in the capital markets. Part IV will
discuss IOSCO’S role in the international harmonization process and whether IOSCO
can successfully raise standards in these controversial areas in the face of political
pressure from market players and competition between capital market centers.

This Article concludes that IOSCO harmonization efforts tend to be at a level of
generality that may be an insufficient prod to regulatory reform. When national interests
are at stake, securities regulators follow those interests rather than IOSCO directives.
Since IOSCO has no enforcement mechanisms aside from peer pressure, and its
members are so numerous and varied, it is unrealistic to expect rigorous and detailed
harmonization of new standards of conduct or regulation. Nevertheless, IOSCO can
play a useful role in highlighting critical emerging areas where securities regulation is in
need of reform and it has done so with regard to a number of systemic risk issues in the
trading markets.

II. IOSCO’S OBJECTIVES AND PRINCIPLES\textsuperscript{5}

The IOSCO Principles paper of June 2010 sets forth three objectives of securities
regulation. These are: protecting investors (including customers or other consumers of
financial services); ensuring that markets are fair, efficient and transparent; and
reducing systemic risk.\textsuperscript{6} It is worth noting at the outset that since the United States is the
only country in the world that separates securities and financial futures regulation,\textsuperscript{7}

\textsuperscript{5} IOSCO, OBJECTIVES AND PRINCIPLES OF SECURITIES REGULATION (June 2010) (hereinafter Principles).
\textsuperscript{6} \textit{Id.} at 3.
\textsuperscript{7} See DEPT’ OF THE TREASURY, THE DEPARTMENT OF THE TREASURY BLUEPRINT FOR A MODERNIZED FINANCIAL
REGULATORY STRUCTURE, 137-44 (2008).
IOSCO’s references to security markets include the derivatives markets.\(^8\) The thirty-eight IOSCO Principles are grouped into nine categories: principles relating to the regulator; principles for self-regulation; principles for securities regulation enforcement; principles for cooperation in regulation; principles for issuers; principles for auditors, credit rating agencies and other information providers; principles for collective investment schemes; principles for market intermediaries; and principles for secondary markets. The first four relate to the organization, powers and functioning of regulatory agencies.\(^9\) When IOSCO revised its Principles in an attempt to provide guidance on how to address the issues highlighted by the crisis, it adopted two of its eight new principles relating to the regulator that focus on risk. Principle 6 addresses the securities regulator’s role and conduct in identifying, assessing and mitigating systemic risk and Principle 7 exhorts the regulator to regularly review the regulatory perimeter. IOSCO is currently developing an appropriate methodology to support these new principles and has already incorporated the identification and mitigation of systemic risk in its strategic mission and goals for the next five years. It also believes that it is well-suited to lead responses to emerging regulatory issues.

IOSCO’s fifth category of principles relating to issuers touches on risk in that it states that there should be “full, accurate and timely disclosure of financial results, risk and other information which is material to investors’ decisions.”\(^10\) Like the principles relating to issuers, the remaining principles relate to players in the capital markets, who are gatekeepers, members of the shadow banking system, or non-bank intermediaries. Some of these principles now focus on risk. Under the principles relating to collective investment schemes is Principle 27, which promotes regulation that ensures a proper and disclosed basis for asset valuation and the pricing and redemption of collective investment units, and Principle 28, which calls for regulation to ensure that hedge funds and/or hedge fund managers are subject to appropriate oversight.\(^11\) Under the principles for market intermediaries, Principle 30 provides that there should be initial and ongoing capital and other prudential requirements for market intermediaries that reflect the risks they undertake and Principle 32 provides that there should be procedures for dealing with the failure of a market intermediary to contain systemic risk.\(^12\) Finally, under the principles for secondary markets, Principle 37 provides that regulation should aim to ensure the proper management of large exposures, default risk and market disruption and Principle 38 provides that securities settlement systems and central counterparties should be subject to regulation to reduce risk.\(^13\)

\(^8\) Principles, at n. 1.
\(^9\) Id. at 4.
\(^10\) Id. at 8.
\(^11\) Id. at 10.
\(^12\) Id. at 11.
\(^13\) Id. at 12.
The IOSCO objectives and principles are very general, so it is necessary to look to more specific papers to appreciate the strictures on regulating risk by securities commissions. One such paper, entitled **Mitigating Systemic Risk: A Role for Securities Regulators**, was published by IOSCO in February 2011.\textsuperscript{14} This paper was prepared by IOSCO’s Technical Committee, which is comprised of regulators\textsuperscript{15} from the major capital markets and is often dominated by U.S. and European regulators.\textsuperscript{16} The paper points out that securities regulation has traditionally focused on disclosure and business conduct oversight instead of systemic risk, which was relegated to monetary authorities and financial regulators.\textsuperscript{17} This traditional split in oversight proved insufficient in the 2008 crisis, particularly when risks arose from areas not within the traditional oversight of securities regulators.\textsuperscript{18} Examples of factors that threatened financial stability and were not mitigated by business conduct oversight included: the role of the shadow banking system; the interconnectedness of the global market place; the lack of incentives that market participants had to curb inappropriate risks; the innovation and complexity of financial products that resulted in information asymmetries and inadequate disclosure; the increasingly more difficult and costly management of conflicts; the cyclicity of financial markets; and the inherent risks in (over-the-counter (“OTC”) markets’ lack of transparency and robust infrastructure.\textsuperscript{19}

The IOSCO paper analyzed the sources and transmission of systemic risks as coming from size, interconnectedness, lack of substitutes and concentration, lack of transparency, leverage, market participant behavior, and information asymmetry and moral hazard.\textsuperscript{20} The Technical Committee urged regulators to be mindful of regulatory gaps and how these gaps can contribute to the build-up of systemic risk. Most notably, exemptions for particular market elements from regulatory oversight and the policy considerations underlying these exemptions should be considered and evaluated on an ongoing basis. Similarly, regulators should address gaps that arise from activities that are currently lightly regulated, as well as new market activities for which there is not yet a regulatory response. To address regulatory gaps arising outside of its jurisdiction, a securities regulator should conduct regular reviews of the perimeter of its regulation, coordinate with other regulators who do have the supervisory authority, and cooperate with international regulators. This analysis might seem very general, but it pinpoints

\textsuperscript{14} Mitigating Risk, supra note ___.
\textsuperscript{15} A current list of the members of the IOSCO Technical Committee is available at http://www.iosco.org/lists/display_committees.cfm?cmtid=3.
\textsuperscript{16} Ironically, the Securities and Exchange Commission has often used IOSCO to promote higher standards than the U.S. regulator has been able to impose. See Roberta S. Karmel & Claire R. Kelly, *The Hardening of Soft Law in Securities Regulation*, 34 BROOK. J. INT’L L. 883 (2009).
\textsuperscript{17} Mitigating Risk, supra note ___, at 8.
\textsuperscript{18} Id.
\textsuperscript{19} Id. at 8-9.
\textsuperscript{20} Id. at 16-29.
several of the causes of the financial meltdown: the failure to regulate swaps and credit derivatives; the failure to regulate mortgage brokers; the failure to regulate hedge funds or credit rating agencies; the inadequate regulation of securitized products and U.S. Securities and Exchange Commission ("SEC") exemptions for sophisticated investors.\textsuperscript{21}

These failures were endemic to a deregulatory philosophy in the United States and elsewhere. It is difficult to blame securities regulators when, at least in the United States, Congress and the courts were also responsible for these regulatory failures. Where regulated industries have so much power and influence over lawmakers, there is a lack of political will to engage in vigorous regulation even when regulators perceive the dangers of insufficient market place standards.\textsuperscript{22} Nevertheless, IOSCO is now starting to build a research capacity and to adopt a strategic direction that emphasizes the need for securities regulators to identify, monitor and manage systemic risks.

The IOSCO paper on mitigating systemic risk explains the tools available to securities regulators that can reinforce the stability of the financial system. These are: transparency and disclosure; business conduct oversight; organizational, prudential and governance requirements; prevention of risk transmission through rules regarding trading infrastructure; and emergency powers.\textsuperscript{23} In addition, IOSCO, as an international body of regulators, stressed intra-jurisdictional communication and exchange of information among regulators about systemic risk to help prevent the emergence of gaps in oversight and identify possible transfers of risk or cross-sectoral risks.\textsuperscript{24} Regulators were asked to leverage the work of other regulators and call on self-regulatory organizations to help, when applicable.\textsuperscript{25} On the international level, securities regulators were encouraged to continue their collaboration through IOSCO to improve transparency and disclosure in various international securities market and be active participants in international supervisory colleges.\textsuperscript{26} The paper also recommended that

\begin{itemize}
\item \textsuperscript{21} \textit{Id.} at 26-27.
\item \textsuperscript{22} Brooksley Born, chairman of the CFTC from 1996 to 1999, became aware of the speed at which over-the-counter derivatives market was growing and repeatedly tried to regulate it. In May 1998, the CFTC published a concept release and asked market participants and OTC derivative dealers for comments, but the report was met with a strong negative reaction from other financial regulators. Then-Federal Reserve Chairman Alan Greenspan and then-Treasury Secretary Robert Rubin were fiercely opposed to regulation and recommended that Congress permanently strip the CFTC of regulatory authority over derivatives. See Peter S. Goodman, \textit{Taking Hard New Look at a Greenspan Legacy}, N.Y. TIMES, Oct. 8, 2008, available at http://www.nytimes.com/2008/10/09/business/economy/09greenspan.html?pagewanted=print
\item \textsuperscript{23} Mitigating Risk, at 40.
\item \textsuperscript{24} \textit{Id.} at 49.
\item \textsuperscript{25} \textit{Id.}
\item \textsuperscript{26} \textit{Id.}
\end{itemize}
regulators promote confidence in markets through adequate communication about risk.27

Some of the causes of the financial crisis were associated with a range of financial innovations, such as CDOs, CDSs, SIVs and others.28 According to IOSCO, a new framework for financial innovation should therefore include greater consideration of the risks attached to innovations at the level of financial institutions and regulators; close collaboration between supervisors and regulators to consider the various potential impacts of innovations and transfers of risk; implication for the resources of regulators needed to maintain appropriate levels of surveillance and control; and consideration of the international dimension of financial innovation in order to prevent regulatory arbitrage.29

IOSCO also urges securities regulators to periodically review their regulatory coverage of financing activities to ensure that none escapes appropriate regulation.30 Regulators should do so by regularly surveying activity in the financial and securities markets to understand the development in those markets and to identify opportunities for cooperation and changes; setting internal thresholds for intervening in new and expanding markets and activities; and setting regulatory goals for intervention to evaluate the appropriateness of and need for such measures.31

One of the key concerns of financial regulators in the wake of the crisis is the shadow banking sector. This is of special importance to securities regulators since, by definition, shadow banking enterprises are not banks subject to supervision by others. If such an enterprise is considered a systemically important financial institution in the United States by the Financial Stability Oversight Commission (“FSOC”), the enterprise will become subject to regulation by the Federal Reserve Board.32 It is unclear whether large hedge funds, for example, will fall into this category. IOSCO has recommended that together with prudential regulators, securities regulators should consider whether any action should be taken with respect to shadow banking entities and activities; and if so, who and how should the monitoring and regulating be carried out.33


27 Id. at 50.
28 Collateralized Debt Obligations (CDOs) are investment-grade securities backed by a pool of bonds, loans, and other assets. Credit Default Swaps (CDSs) are bilateral contracts designed for credit hedging or speculative investment. Structured Investment Vehicles (SIVs) are operating finance company set up to profit from credit spreads between short-term debt and long-term structured finance products.
29 Mitigating Risk, at 51-52.
30 Id. at 53.
31 Id.
32 12 USCA § 5464 (2010).
33 Mitigating Risk, at 54.
IOSCO’s role is to provide guidance and develop policies and standards on when and how to use the tools available to securities regulators. Its first commitment to this effort is to build a research capacity that will initially focus on the research of systemic risk and put forth an annual report to identify the most important systemic risks for securities regulation at a global level.\textsuperscript{34} IOSCO also intends to conduct risk analyses that focus on risks in specific products, market segments or technologies.\textsuperscript{35} Members are encouraged to enter into bilateral or multilateral Memoranda of Understanding to address cooperation and collaboration on the global level, especially with regard to sharing data and coordinating action on risks.\textsuperscript{36} IOSCO has also taken the step to engage member-SROs on specific risk topics since SROs are one step closer to the markets than their supervisory authorities.\textsuperscript{37} The organization is also considering holding stakeholder consultation, where IOSCO policy makers discuss their work program with representatives of major industry organizations, and organizing an intensive dialogue with top-level industry groups to discuss important systemic risks.\textsuperscript{38} On certain topics, IOSCO recognizes that it needs to work closely with other global bodies, such as the G-20, FSB, BCBS, CPSS, IAIS, ESRB, IMF and World Bank, and when appropriate, certain domestic bodies.\textsuperscript{39} Finally, another activity that could be within the realm of IOSCO’s global work could be the improvement to transparency and disclosure through setting standards for the collection of data and standardizing documentation relevant to systemic risk.\textsuperscript{40}

III. SYSTEMIC THREATS BY UNREGULATED ENTITIES AND VOLATILE MARKETS

\textsuperscript{34} Id. at 57.
\textsuperscript{35} Id.
\textsuperscript{36} Id. at 58.
\textsuperscript{37} Id.
\textsuperscript{38} Id.
\textsuperscript{39} The G-20 is made up of the finance ministers and central bank governors of 19 systemically important industrialized and developing countries and the EU. The Financial Stability Board ("FSB") was established in 2009 as an international body that monitors the global financial system and includes the G-20 economies, members of the Financial Stability Forum, and the EU. The Basel Committee on Banking Supervision ("BCBS") is a committee under the Bank of International Settlement ("BIS") and comprises banking supervisory authorities. The Committee on Payment and Settlement Systems ("CPSS"), also a BIS committee, sets standards for payment and securities settlement systems. The International Association of Insurance Supervisors ("IAIS") represents insurance regulators and supervisors of some 190 jurisdictions. The European Systemic Risk Board ("ESRB") was established in 2010, in response to the financial crisis, by the European Commission to ensure the macro-prudential supervision of EU’s financial system.
\textsuperscript{40} Mitigating Risk., at 59.
A. Hedge Funds

The role of hedge funds in the securities markets is controversial. So are questions as to how they were regulated in the past and how they should be regulated going forward. Indeed, there is not even a generally accepted definition of a “hedge fund.” The term generally refers to pools of assets, usually securities, which are professionally managed using innovative investment strategies, but are not registered and regulated like traditional investment companies or undertakings. Some market observers believe hedge funds are mechanisms for greater market efficiency and more effective corporate governance. Others believe they are conduits for fraud and market manipulation and sources of systemic risk. According to the Joint Forum, although debates continue over whether hedge funds may have contributed to the financial crisis, there is a general consensus that they may have a systemic impact. Certainly, the threat to the capital markets that a hedge fund can pose has been apparent since the Long Term Capital Management (“LTCM”) collapse of the late 1990s. LTCM was an investment vehicle for a number of hedge funds. Its portfolio was extraordinarily large and risky, and its off-balance sheet activities and its use of derivatives made its activities much more leveraged and risky. When Russia devalued the ruble and declared a debt moratorium on August 17, 1998, LTCM became highly vulnerable to the market conditions that ensued and by September it had lost almost 50 per cent of its equity. The Federal Reserve Board was required to intervene because of the systemic threat the collapse of LTCM would have posed to the capital markets. Although the Federal Reserve Board did not lend money to LTCM itself, it facilitated a private sector recapitalization of LTCM composed of fourteen banks and securities firms, which were LTCM’s largest creditors. Another more recent example of the systemic risk posed by hedge funds is the two in-house hedge funds Bear Stearns was obliged to rescue, which some say was the beginning of the financial crisis of 2008.

Although there is a general perception that hedge funds have not been previously regulated, this perception is not entirely valid. In the United Kingdom, hedge funds were required to be authorized as investment managers and/or advisers and were then subject to senior management arrangement, systems and controls and conduct of

41 Eddy Wymeersch, The regulation of private equity, hedge funds and state funds, WP 2010-06, University of Gent, Apr. 2010, at 2 (hereinafter Wymeersch).
43 The Joint Forum is comprised of the Basel Committee on Banking Supervision, IOSCO, and the International Association of Insurance Supervisors.
45 See WILLIAM D. COHAN, HOUSE OF CARDS 244-53 (2009).
46 See id. at 92-94, 344-49.
business rules for dealers and managers. Elsewhere in Europe, hedge funds are restricted to private offerings and subject to some regulation as to the conduct of their business. Further, hedge funds in the European Union (“EU”) have been subject to certain directives such as the Markets in Financial Instruments Directive, the Transparency Directive and the Market Abuse Directive. Nevertheless, most hedge funds operating in Europe operate from offshore in order to limit the amount of regulation to which they are subject.

Similarly, in the United States, hedge funds have been subject to laws generally applicable to traders in the securities markets, and they have generally been required to limit their investors to “accredited investors” or “qualified purchasers.” Nevertheless, prior to the financial crisis, hedge funds were not required to register with the SEC and they were not subject to regulation as to their business operations, capitalization or trading activities. Although many hedge funds were nevertheless registered with the SEC as investment advisers, and others were registered with the Commodity Futures Trading Commission (“CFTC”) as commodity pool operators, an SEC initiative to compel hedge funds to become registered entities was challenged in the courts and was declared beyond the SEC’s authority.

In addition to concerns about hedge funds, regulators have also focused on two other alternative investment vehicles—private equity funds and sovereign wealth funds. Although there is no standard definition of a private equity fund, generally they are pools of capital, which finance non-public companies, either start-ups or former public companies, with a view toward managing the companies until they can be floated in the public securities markets. Questions as to whether these funds should be regulated in the future, either like hedge funds or separately, have been discussed since the financial crisis. Sovereign wealth funds also are alternative investment vehicles, but regulatory concerns and prohibitions have generally not been focused on their systemic threats, but rather the political implications of their investment activities.

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47 Awrey, at n. 10.
48 Wymeersch, at 5-8.
52 Awrey, at n. 10.
53 Hedge funds limit their investors to these two categories in order to avoid registering as an Investment Company under the Investment Company Act. See 15 U.S.C. § 80-a(3)(c)(1) and (c)(7).
54 Goldstein v. SEC, 451 F.3d 873 (9th Cir. 2006).
55 See Wymeersch, at 24.
56 Wymeersch, 29-31. Because these funds are managed by foreign governments, and their activities often are secretive, they are viewed with suspicion. But they also have been looked upon as possible providers of financial and economic stability in the post-crisis world economy.
In response to the financial crisis, the G-20 has favored regulatory oversight over hedge funds and hedge fund managers. However, in March 2009, the finance ministers of the G-20 were not in full agreement on how to regulate hedge funds. Some European countries wanted the funds to be overseen like banks, while the United States and United Kingdom favored less intrusive regulation. This debate was later continued in Europe with respect to the Directive on Alternative Investment Fund Managers, which will be discussed below. At the G-20 summits in Washington and London, the G-20 leaders agreed that all hedge fund managers should be registered and authorized by their national regulators and that the managers should report systemically relevant data to those regulators.

In response to the G-20’s policy decision, IOSCO issued a report on hedge fund oversight in June 2009. IOSCO’s definition of “hedge funds” refers to all investment schemes displaying a combination of enumerated characteristics:

(B)orrowing and leverage restrictions are not applied and many hedge funds use high levels of leverage; significant performance fees (often in the form of a percentage of profits) are paid to the manager in addition to an annual management fee; investors are typically permitted to redeem their interests periodically; often significant “own” funds are invested by the manager; derivatives are used, often for speculative purposes, and there is an ability to short sell securities; and more diverse risks or complex underlying products are involved.

Based on its own research, comments from the public, and inputs from industry members, IOSCO recommended six high level principles aimed at restoring investor confidence through improved investor protection and better detection and avoidance of the systemic and other regulatory risks posed by hedge funds. As recognized by IOSCO, the approach to hedge fund regulation needs to be balanced and measured and the ultimate regulatory measures will require strong collective global action and application. The six principles are described below.

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59 IOSCO, HEDGE FUND OVERSIGHT (June 2009) (hereinafter Hedge Fund Oversight).
60 Hedge Fund Oversight, at ¶ 5.
61 Id. at ¶ 22.
The first Principle is that hedge funds and/or hedge fund managers should be subject to mandatory regulation. According to IOSCO, industry structure should dictate whether funds or their advisers should be subject to this additional layer of regulation. In any event, any regulatory oversight should be risk-based, proportional, and more focused on systemically important hedge fund managers. With the information gathered through the registration process, regulators can gain adequate insight into the hedge fund business and therefore be able to identify, analyze, and mitigate possible systemic risks. Prospective investors, on the other hand, can use the information to evaluate their investment options.

The second Principle is that hedge fund managers and/or advisers required to register should also be subject to appropriate ongoing regulatory requirements relating to: organizational and operational standards; conflicts of interest and other conduct of business rules; disclosure to investors; and prudential regulation. Organizational and operational standards should take into account a comprehensive risk management framework that considers risks from all facets of the fund managers’ business (such as market, liquidity, credit, and operational risks). Managers should regularly monitor these risks and make appropriate disclosure to investors. There should be a strong and independent compliance function, robust valuation process, adequate segregation and protection of client monies and assets, and maintenance of funds’ trading records. Managers’ business accounts should also be audited on an annual basis.

Managers need to provide full disclosure about any conflicts of interest and how these conflicts are managed. Compensation structures should also be subject to strong governance mechanisms to counter short-term profit motives. IOSCO recommends aligning standards for compensation structure to those developed by the Financial Stability Board ("FSB"). With regard to disclosure to investors, managers should disclose information on risks, conditions and limits on redemption, existence of side letters and gating structures, fund’s strategy and performance, and audited financial statements. Regulators, in turn, should have the power to inspect the funds as well as the managers and their records. Finally, managers should be subject to prudential requirements that reflect the risks they take. However, since not all IOSCO members are prudential regulators, IOSCO recognizes that this principle needs to be further developed at a global level.

Principle three of the IOSCO paper on hedge funds is that prime brokers and banks which provide funding to hedge funds should be subject to mandatory registration, regulation and supervision. They should have in place appropriate risk management

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62 Id. at ¶ 23–30.
63 Id. at ¶ 31–38.
64 Id. at ¶ 39–42.
systems and controls to monitor their counterparty credit risk exposures to hedge funds. IOSCO recommends that prime brokers and banks, both already subject to conduct and prudential regulation, should have strong risk management controls over their exposures to hedge funds and an ability to obtain information from the funds to engage in effective risk management. Securities regulators, on the other hand, should be able to obtain non-public information on these entities’ most systemically significant hedge fund counterparties.

The fourth Principle of the IOSCO paper is that hedge fund managers and/or advisers and prime brokers should provide to the relevant regulator information for systemic risk purposes, including the identification, analysis and mitigation of systemic risk. Regulators should seek to collect from these entities information on: the amount of credit exposures to hedge funds; the aggregate and largest current exposures; potential exposures; market or product concentrations on an individual or aggregate fund basis; hedge fund managers with significant portion of the daily liquidity/volume of important markets; prime brokers’ and banks’ aggregate margin requirements; cash loaned; value of long and short positions; and net equity.

Hedge fund managers and advisers should provide information on the funds they manage, such as background on management, assets under management, services, fees, strategies, and affiliates. In addition, managers and advisers should also provide information on their prime brokers and custodians, information on the manager’s larger funds, leverage and risk, counterparty risks, product exposure, and any type of concentration. These information requirements should be imposed on managers for all the funds they manage, regardless of the location of the funds. The goal is to provide regulators with enough information to identify sources of systemic risk that hedge funds may pose.

Principle Five of the IOSCO paper is that regulators should encourage and take account of the development, implementation and convergence of industry good practices, where appropriate. The Technical Committee stated that it was committed to working with industry bodies to develop a consolidated set of industry standards, and regulators should encourage hedge funds and their managers to adhere to such set of standards. Regulators should also consider and agree on how they could be informed about the assumption of and compliance with the standards by individual hedge funds and managers.

Finally, the sixth Principle is that regulators should have the authority to cooperate and share information with each other, when appropriate, in order to facilitate efficient and effective oversight of globally active managers and/or advisers and/or funds and

\[\text{Id. at } \| 43-49.\]
\[\text{Id. at } \| 50-52.\]
to help identify systemic risks, market integrity and other risks arising from the activities or exposures of hedge funds with a view to mitigating such risks across borders.\textsuperscript{67} IOSCO expressed the view that securities regulators should have the authority to collect relevant information from hedge funds on behalf of a foreign regulator; exchange on a timely and on-going basis with relevant regulators on internationally active funds that may pose systemic risks; perform joint inspections; and enforce against wrongdoers and assist foreign regulators in enforcement. With regard to exchanging information relevant to investigation and enforcement proceedings, IOSCO recommends using its principles on the Multilateral Memorandum of Understandings; as for the exchange of non-public supervisory information, the Technical Committee should consider developing appropriate framework and principles to assist regulators in doing so.

After the issuance of the IOSCO report on hedge fund oversight, important legislative developments with regard to hedge fund regulation took place in the United States and the EU. In the United States, hedge funds had operated in a largely unregulated environment for many years, and had grown and thrived in the absence of registration with the SEC or the regulation that flows from such registration. In the United States, the amount of assets under hedge fund management expanded from $100,000 in 1949 to $2 trillion in the summer of 2008; it subsequently declined to approximately $1.5 trillion in 2009.\textsuperscript{68} Although hedge funds perform important market functions, in particular price discovery and the provision of liquidity, the lack of hedge fund transparency made it difficult for investors, counterparties and regulators to evaluate the risks they posed.\textsuperscript{69} This regulatory gap was closed by the Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank"),\textsuperscript{70} which requires most hedge funds to register with the SEC and become subject to SEC examination and regulation. As is the case with IOSCO and other bodies, the term “hedge fund” has not been defined by the SEC or in Dodd-Frank. For purposes of the U.S. securities laws, this term generally refers to investment vehicles that hold a pool of securities, and perhaps other assets, whose interests are not sold in a registered public offering and that are not registered as investment companies under the Investment Company Act of 1940 ("Investment Company Act").\textsuperscript{71} Dodd-Frank uses the statutory term “private investment funds.” Such a fund is “an issuer that would be an investment company, as defined in

\textsuperscript{67} Id. at ¶ 53−57.
section 3 of the Investment Company Act of 1940... but for section 3(c)(1) or 3(c)(7) of that Act.” 72 This bit of legislative complexity refers to the exemptions from registration for funds with fewer than 100 investors or funds with investors who are all “qualified purchasers”—generally any natural person with assets of at least $5 million or any adviser who owns or invests on a discretionary basis at least $25 million. The term “private investment funds” includes hedge funds, but also encompasses private equity funds, venture capital funds, and some other vehicles.

Section 403 of Dodd-Frank requires all “private funds” to register as investment advisers with the SEC one year after its enactment except for any investment adviser that is registered as a commodity trading adviser with the CFTC and advises a private fund. Nevertheless, if after the enactment of Dodd-Frank, the business of such a commodity trading adviser “should become predominantly the provision of securities-related advice,” that adviser needs to register with the SEC. The term “predominantly the provision of securities-related advice” is not defined in Dodd-Frank, but the term “predominantly engaged in financial activities” is defined as 85% of consolidated gross revenues and assets. 73 It therefore is likely the SEC will interpret the concept of predominantly engaged in securities-related advice similarly. Advisers to small business investment companies, venture capital funds and family offices also are exempt from SEC registration and regulation. 74 Although the SEC has passed rules with regard to the obligations of hedge funds to register, it has pushed off the registration requirement until 2012. 75

Congress was determined to bring hedge funds within the ambit of SEC regulation in Dodd-Frank for two reasons. First, although the majority of investors in most hedge funds are sophisticated, and fall within the definition of an “accredited investor,” and many are “qualified purchasers,” abuses and insolvencies by some hedge funds have demonstrated that investor protection is an issue. 76 Second, hedge funds may pose a systemic risk as a result of either their size or trading methods.

72 Dodd-Frank, § 402.
73 Dodd-Frank, § 102(a)(6).
74 Dodd-Frank, §§ 403, 407.
75 See Investment Advisers Act Rel. No. 2011-133 (June 22, 2011). In part, this is due to the technical complexities of the new registration requirements, coupled with the deregistration requirements for mid-sized hedge funds.
76 A variety of common fact patterns involving hedge funds (or putative hedge funds) have resulted in SEC enforcement actions. 76 One type of case is the Ponzi scheme where a concern is purporting to be a hedge fund, but the firm or its promoter is instead pocketing the funds it raises. The most high profile of these case was the Madoff case. SEC v. Bernard L. Madoff and Bernard L. Madoff Investment Securities, LLC, 08 Civ. 10791 (LLS) (S.D.N.Y. Dec. 11, 2008); see also SEC v. Stanford International Bank et al., Lit. Rel. No. 20901 (Feb. 17, 2009). A closely related type of case is the misrepresentation of investment returns to investors in hedge funds based on inaccurate portfolio valuations. E.g., SEC v. James M. Nicholson, Lit. Rel. No. 20911 (Feb. 25,
Once hedge funds are registered with the SEC, they will be subject to new obligations. They will be required to appoint a chief compliance officer, establish a code of ethics and comply with custody and record keeping requirements. Although the SEC is given rule making authority to specify what records need to be prepared and maintained,\(^77\) certain records are specified in Dodd-Frank: the amount of assets under management and use of leverage, including off balance sheet items; counterparty risk exposure; trading and investment positions; valuation policies and practices of the fund; types of assets held; side arrangements or side letters; and such other information deemed necessary by the SEC and the FSOC.\(^78\) Further, all registered funds will be subject to periodic, special and other examinations by the SEC.\(^79\)

Dodd-Frank included a provision granting the SEC the right not to disclose records or information obtained through its risk assessment, surveillance, or other regulatory and oversight functions of each type of firm regulated under the securities laws.\(^80\) The reason for this provision was that hedge funds will be a new financial institution to be overseen by the SEC, and hedge funds have been concerned that their proprietary trading information could become available to competitors after they are compelled to disclose such information to the SEC. The purpose of the provision was to put the SEC on a par with bank regulators when conducting examinations. This provision became controversial because Fox News and some members of Congress claimed that it would allow the SEC to deny requests for information in order to shield itself from public criticism. The Senate and House therefore passed bills repealing this Dodd-Frank provision and replacing it with an expanded exemption from Freedom of Information Act disclosure to include hedge funds in the protection of the exemption for matters that are "contained in or related to examination, operating, or condition reports

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\(^77\) Dodd-Frank, § 404, amending Investment Advisers Act § 204.

\(^78\) Id.

\(^79\) Advisers Act § 204(b)(6), as amended by Dodd-Frank.

\(^80\) Dodd-Frank § 929I.
prepared by, on behalf of, or for the use of an agency responsible for the regulation or supervision of financial institutions.” 81

Once hedge funds are SEC registered advisers, they will be required to safeguard client assets over which the advisers have custody, including but not limited to verification of such assets by an independent public accountant. 82 This statutory provision is in response to the Madoff scandal and is intended to reduce the dangers of Ponzi schemes and thefts. It is in line with SEC rulemaking passed as a result of the Madoff scandal. 83

In addition to investor protection, Dodd-Frank is also aimed at reducing the potential systemic risk hedge funds pose to the broader financial system as illustrated by the Long Term Capital situation. The main tool in the regulatory arsenal provided by Dodd-Frank is that hedge funds could become subject to supervision as nonbank financial companies if it is determined that they pose a threat to the financial stability of the United States capital markets. 84 This would happen if the FSOC, by a 2/3 vote, including a vote of the Secretary of the Treasury as Chair, determines that such a threat exists. Further, if a hedge fund is a securities holding company, that is the parent of a broker-dealer required by foreign law to be subject to consolidated regulation, the hedge fund might be required to register with the Federal Reserve Board and be subject to Fed supervision. 85

The European Union also has adopted a new regime for the regulation of alternative investment funds (“AIFs”), including hedge funds, and alternative investment fund managers (“AIFM”) that in some respects overlaps with the new U.S. regulatory scheme, but in other ways conflicts with the Dodd-Frank framework. The Directive on Alternative Investment Fund Managers (“AIFMD”) generated extensive controversy, not only within Europe, but between Europe and the United States. The AIFMD was approved by the European Parliament in November 2010, but was not finally published until July 1, 2011. 86 The Directive does not directly regulate the funds but, as in the United States, imposes registration requirements and regulatory responsibilities on the managers of AIFs. Also, as in the United States, the directive applies essentially to all collective investment funds.

82 Dodd-Frank, § 411.
84 Dodd-Frank, § 113.
85 Dodd-Frank, § 618.)
that are not regulated funds or UCITS. Nevertheless the United States and the European Union part company with regard to some of the substantive requirements imposed upon AIFs.

Managers of AIFs must be authorized in the home state of the AIF, or if the AIFM is not based in the EU, in the most appropriate member state. In order to be authorized, the AIFM must comply with various requirements, including capital requirements and the requirements to have a depository for the assets under management. The Directive also has conduct of business rules, a requirement for independent asset valuation, restrictions on delegation, transparency and disclosure requirements, restrictions on remuneration of senior staff and 5% “skin in the game” requirements for investing in securitizations. Once authorized, the manager has a passport to sell the AIF throughout Europe.

The issue of regulation of “third country funds” has been contentious. A non-EU manager will be permitted to manage EU domiciled AIFs, and market non-EU domiciled AIFs subject to certain restrictions and agreements between the EU and the home regulator of the AIF. There are complicated phase-in requirements for non-EU domiciled AIFs beginning in 2013 that could disadvantage non-EU domiciled AIFs then and now. When the AIFMD was being debated and drafted, bitter disputes broke out between the EU authorities and U.S. regulators, especially the Secretary of the Treasury, who claimed that the directive was protectionist. Although some of these tensions have been solved by the final form of the Directive, final regulations have not yet been put into place. The European Commission needs to develop numerous detailed rules in

88 The conduct of business rules cover conflicts of interest, risk management, and liquidity management.
90 Id. at art. 20, p. 27.
91 Id. at art. 22, p. 32.
92 Id. at art. 23, p. 33.
93 Id. at art. 13, p. 24.
94 Id. at art. 17, p. 26.
95 James Politi, Geithner Urges EU Fund Rules Rethink, FINANCIAL TIMES, April 6, 2010, http://www.ft.com/cms/s/0/00591036-41bb-11df-865a-00144feabdc0.html#axzz1WWr4Q9lZ
96 Non-EU hedge fund managers may be able to continue to market non-EU AIFs to professional investors under Member States private placement regimes. The EU AIFM must comply with all of the provisions in the AIFMD except the deposits remaining requirements, there must be cooperation arrangements in place, the non-EU AIF must not be established in a jurisdiction that is designated as non-cooperative by FATF. Additionally, Member States may impose stricter marketing requirements on the EU AIFM. Council Directive 2011/61, art. 34–40, 2011 O.J. (L 174) 1, 42–54 (EC).
order to implement the AIFMD. This challenge is similar to that facing the SEC in implementing Dodd-Frank. The Commission has asked the European Securities Market Authority ("ESMA") for draft advice and that advice is voluminous.

Asian jurisdictions also have been developing new regulations for hedge funds. Hong Kong requires hedge funds to register with its financial regulator, the Securities and Futures Commission ("SFC"). Recently, the SFC has focused on increasing its enforcement efforts by stepping up its inspections of registered funds. On June 25, 2011, the SFC also implemented increased disclosure rules that require SFC registered funds to provide investors with a product key facts statement and an offering document that satisfy a number of additional disclosure requirements as set out in the SFC Handbook, which came into effect a year ago. Singapore, a direct competitor to Hong Kong, has also been vying for hedge fund business and is attempting to make it easier for hedge funds to operate there.

As part of an attempt to attract start up hedge funds, the Monetary Authority of Singapore ("MAS") approved rules in April 2010 exempting funds with less than S$250 million ($183 million) from registration so long as the fund serves 30 or less "qualified" investors.

Whether the standards enunciated by IOSCO will serve to harmonize hedge fund regulation around the world remains an open question, especially since differences

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98 "ESMA is an independent EU Authority that contributes to safeguarding the stability of the European Union’s financial system by ensuring the integrity, transparency, efficiency and orderly functioning of securities markets, as well as enhancing investor protection. In particular, ESMA fosters supervisory convergence both amongst securities regulators, and across financial sectors by working closely with the other European Supervisory Authorities." ESMA Website, http://www.esma.europa.eu/.
99 ESMA’s advice regarding the AIFMD is over 400 pages long and it would be outside the scope of this paper to summarize the advice. It is worthy to note, however, that the ESMA provided the most comments in the areas of depository requirements, transparency and leverage. See ESMA, DRAFT TECHNICAL ADVICE TO THE EUROPEAN COMMISSION ON POSSIBLE IMPLEMENTING MEASURES OF THE ALTERNATIVE INVESTMENT FUND MANAGERS DIRECTIVE (JULY 2011), http://www.esma.europa.eu/data/document/2011_209.pdf.
101 Id.
104 Id.
have emerged between United States and EU regulation of the funds, and Asian
markets are attempting to attract hedge funds into their markets. Although the mature
capital markets are following IOSCO’s principles with regard to hedge funds by
requiring their registration and regulation, it does not follow that such regulation will be
consistently formulated or applied.

B. Credit Rating Agencies

The Financial Crisis Inquiry Commission (“FCIC”) was tasked with examining the
financial and economic crisis of 2008 and explain its causes. The FCIC concluded that
“the failures of credit rating agencies were essential cogs in the wheel of financial
destruction” and “(t)he three dominant credit rating agencies were key enablers of the
financial meltdown.”105 Although criticism of the conduct and competence of credit
rating agencies (“CRAs”) after 2008 focused on the huge number of rating agencies’
write downs of previously highly rated residential mortgage-backed securities (“RMBS”)
and collateralized debt obligations (“CDOs”) in the context of the sub-prime mortgage
crisis, intense scrutiny of CRAs has been ongoing in the United States and overseas since
at least the collapse of Enron106 and even earlier, the rating agencies’ failure to
anticipate the 1997–1998 Asian debt crisis which adversely impacted sovereign debt
issues.107

CRAs analyze and evaluate the creditworthiness of corporate and sovereign issuers
of debt securities. While CRA ratings are often thought to represent a judgment on the
worthiness of an investment because of the use of the term “investment grade” to refer
to highly rated securities, the opinions of CRAs relate solely to the likelihood that a
particular debt security will perform according to its terms. A high credit rating does not
purport to be an opinion that the debt instrument is a good investment.108 Nevertheless,
specific references to credit ratings, in the rules of the SEC and the Basel II and Basel III
accords as a surrogate for the riskiness of investments held by regulated entities, gave
such ratings significance and credibility as a measure of the creditworthiness of

105 FCIC, THE FINANCIAL CRISIS INQUIRY REPORT: FINAL REPORT OF THE NATIONAL COMMISSION ON THE
CAUSES OF THE FINANCIAL AND ECONOMIC CRISIS IN THE UNITED STATES (Jan. 2011), at xxv.
106 Until four days before Enron declared bankruptcy, major CRAs continued to rate its debt
Similarly, WorldCom was rated investment grade three months before filing for bankruptcy and
Global Crossing was rated investment grade in March 2002 and defaulted on loans in July 2002.
Statement of Egan Jones on Credit Rating Agencies, Nov. 15, 2002 Hearing on Credit Rating
107 Id.
108 TECHNICAL COMMITTEE OF IOSCO, THE ROLE OF CREDIT RATING AGENCIES IN STRUCTURED FINANCE
MARKETS (March 2008), at n.8.
issuers. In 1975, the SEC adopted the term nationally recognized statistical rating organization ("NRSRO") to determine capital charges for broker-dealers for purposes of the SEC’s capital adequacy or net capital rule. Marketplace and regulatory reliance on credit ratings then gradually increased, and the concept of an NRSRO became embedded in a wide range of U.S. regulations of financial institutions, as well as state, federal, and foreign laws relating to creditworthiness. The failure of the CRAs to promptly adjust ratings or forecast the demise of issuers that went bankrupt when the stock market technology bubble burst, then led to scrutiny of their performance and lack of government regulation.

The SEC never passed a rule defining NRSROs, but rather recognized agencies as such through a no-action letter process. The SEC staff considered a number of factors, the most important of which was that the agency was "nationally recognized" for ratings reliability. This opaque process, and the highly concentrated number of NRSROs, led to criticism of the SEC’s procedures, but government regulation of CRAs was too controversial to result in legislation. Some believed that the NRSRO designation was a barrier to competition in the credit rating business. Others argued that the SEC lacked authority to substantively regulate CRAs and that such authority would be inappropriate because the activities of CRAs are journalistic and protected by the First Amendment. Yet, shortcomings by CRAs raised questions as to whether their lack of regulation and the SEC’s process for designating NRSROs was appropriate. Accordingly, the Sarbanes-Oxley Act of 2002 mandated that the SEC study the role and function of CRAs and submit a report to Congress. This study was required to cover the

110 Sarbanes-Oxley Report, supra note __, at 6.
111 Id. at 7–8.
113 Hill, supra note __, at 55. Other factors taken into consideration were organizational structure; size and experience of staff; the agency’s independence from the company it rates; and internal procedures to prevent misuse of inside information. Id. at 55-56.
115 As will be explained, some authority was given to the SEC in the Credit Rating Agency Reform Act of 1996, Pub. L. No. 109-291 (2006).
118 The report was to be filed not less than 180 days after the passage of the Act. SOX, § 702.
following areas: the role of CRAs in evaluating issuers; the importance of that role to investors and the markets; impediments to accurate appraisals of the financial resources and risks of securities issuers; barriers to entry to the CRA business; measures to improve dissemination of CRA appraisals; and conflicts of interest in rating operations. The SEC issued this required report, but did not draw any firm conclusions concerning how, if at all, CRAs should be regulated. Instead, the SEC stated that it intended to issue a Concept Release covering the following issues: mandating disclosure by NRSROs about the ratings process and other matters; conflicts of interest; anti-competitive or unfair practices; reducing barriers to entry; and ongoing SEC oversight of CRAs. This Concept Release was duly issued in June 2003.\(^\text{119}\)

In the meantime, the Technical Committee of IOSCO formed a task force to study issues relating to CRAs and issued a report in September 2003 describing the role of CRAs in the global capital market.\(^\text{121}\) This task force was chaired by a commissioner of the SEC and included representatives from Australia, Brazil, France, Germany, Hong Kong, Italy, Japan, Ontario, Canada, Portugal, Spain, and the United Kingdom.\(^\text{122}\) At the same time, IOSCO published a set of principles that regulators, CRAs, and other market participants could follow to improve the integrity of the ratings process, and help ensure that investors are provided with timely, high quality ratings.\(^\text{123}\) These principles were fairly general and related to the quality and integrity of the ratings process, independence and conflicts of interest, transparency and timeliness of ratings disclosure, and the use of confidential information. Responding to suggestions that these principles were insufficient to deal with the problems posed by CRAs, particularly in light of the use of credit ratings in Basel II, IOSCO continued to analyze how CRAs should be regulated. In September 2003, IOSCO issued a report on the activities of CRAs, and a Code of Conduct Fundamentals for CRAs.\(^\text{124}\) The Code of Conduct Fundamentals was much more specific than the earlier published principles, and especially focused on the quality of the ratings process, including updating of opinions, conflicts of interest, employee and analyst independence, and transparency. In response, the two largest

\[^{119}\text{Sarbanes-Oxley Report, supra note ____ at 43-45.}\]
\[^{120}\text{Rating Agencies Concept Release, supra note__.}\]
\[^{122}\text{Id. at n.3. The three largest international CRAs—Moody’s, S & P and Fitch—are all U.S. companies. Id. at 8.}\]
CRAs, Moody’s and Standard and Poor’s, published their own Code of Professional Conduct in the second half of 2005.\textsuperscript{125}

The U.S. Congress then passed the Credit Rating Agency Reform Act ("CRA Reform Act") in 2006, which established a system of registration and regulation of NRSROs, and instructed the SEC to formulate implementing rules.\textsuperscript{126} The CRA Reform Act effected three changes in the SEC’s regulation of NRSROs. First, it added definitions of "credit rating," "credit rating agency," "nationally recognized statistical rating organization," and "person associated" with an NRSRO.\textsuperscript{127} Second, it replaced the SEC’s no-action letter procedure for recognizing NRSROs with a registration procedure, and also imposed substantive requirements on NRSROs with respect to misuse of non-public information, conflicts of interest, and anti-competitive or abusive conduct.\textsuperscript{128} Third, it amended the Exchange Act to include NRSROs among the types of entities subject to SEC recordkeeping and reporting requirements.\textsuperscript{129} This statute, however, did not allow the SEC to regulate "the substance of credit ratings or the procedures and methodologies by which any (NRSRO) determines credit ratings."\textsuperscript{130} It also made clear that it did not provide for a private right of action against the rating agency.\textsuperscript{131}

In June 2007, the SEC passed rules implementing the CRA Reform Act. These rules set forth basic registration requirements for NRSROs and obligations to update registration forms.\textsuperscript{132} Further rules subjected NRSROs to recordkeeping and annual financial reporting rules;\textsuperscript{133} and required NRSROs to establish procedures to prevent the misuse of confidential information and to manage conflicts of interest.\textsuperscript{134} Finally, NRSROs were prohibited from certain anti-competitive or abusive practices, relating to tying the issuance or level of a credit rating to an issuer’s purchase of services or products in addition to the credit rating.\textsuperscript{135}

IOSCO continued to work on the problems posed by CRAs and in March 2008, issued a Consultation Report on the role of CRAs in structured finance markets, as well

\begin{itemize}
  \item[\textsuperscript{125}] U.N. Conference on Trade & Dev., Credit Rating Agencies and Their Potential Impact on Developing Countries, UNCTAD/OSG/DP/2008/1 (Jan. 2008), at 12.
  \item[\textsuperscript{127}] Exchange Act, § 3(a)(62).
  \item[\textsuperscript{128}] Exchange Act, § 15E.
  \item[\textsuperscript{129}] Exchange Act, § 17(a).
  \item[\textsuperscript{131}] Id.
  \item[\textsuperscript{132}] Exchange Act Rule 17g-1, 17 C.F. R. § 240.17g-1.
  \item[\textsuperscript{133}] Exchange Act Rules 17g-2, g-3, 17 C.F.R. §§ 17g-2, g-3.
  \item[\textsuperscript{134}] Exchange Act Rules 17g-4, g-5, 17 C.F.R. §§ 240.17g-4, g-5.
  \item[\textsuperscript{135}] Exchange Act Rule 17g-6, 17 C.F.R. § 17g-6.
\end{itemize}
as a new Code of Professional Conduct. This new code did not recommend any sweeping overhaul, and Charles McCreevy, then the European financial commissioner, called it “toothless,” and began pushing for EU regulation of CRAs. In reaction to this development, and in response to the financial crisis, IOSCO issued a paper on international cooperation in the oversight of CRAs.

In that paper, IOSCO expressed the view that as more jurisdictions adopt regulations for the oversight of CRAs in response to the financial crisis, regulatory fragmentation among jurisdictions is of concern. To that end, IOSCO believed that the most effective approach to avoid such fragmentation was to enhance cross-border cooperation among national regulators with powers to inspect and oversee CRAs. Such an approach would allow members to retain their primary responsibility over CRA activities that occur within their jurisdictions, while regulators with concurrent jurisdiction can coordinate in devising regulations and overseeing CRA activities. This approach would also allow regulators to achieve more efficient regulation, streamline the monitoring and surveillance of CRAs by sharing information on CRA’s activities in foreign jurisdictions, and permit a greater degree of cross-border regulatory efficiency, particularly for jurisdictions that elect not to directly regulate CRAs.

In an effort to facilitate the sharing of information among members, IOSCO’s CRA Task Force also developed a confidential model examination module for members with examination authority. The module offers a baseline set of information about CRAs that would be of interest to an examiner, thus providing basic guidance on what type of information individual regulators should expect to share with a counterpart. In addition, IOSCO announced that it had converted the CRA Task Force into a permanent standing committee in order to continue to assist securities regulators’ effort in overseeing CRAs. The main functions of the Standing Committee are to consider

137 See Tony Barber, Bloc Turns Up Heat on Rating Agencies, FIN. TIMES, July 8, 2008, at 3; Gillian Tett, Unease as Regulators Call for More Control Over Ratings System, FIN. TIMES, June 25, 2008, at 25.
138 IOSCO, INTERNATIONAL COOPERATION IN OVERSIGHT OF CREDIT RATING AGENCIES (March 2009) (hereinafter Oversight of CRAs).
139 Id. at 3.
140 Id.
141 Possible mechanisms for carrying out enhanced cross-border cooperation include bilateral arrangements and a college of regulators. Bilateral agreements could provide more robust joint oversight of specific CRAs and could be more tailored to address specific regulatory concerns. A college of regulators, on the other hand, should incorporate certain membership criteria to ensure that the size of the college remains manageable, that the most significant CRA regulators are part of the college, and that all participants are legally able to share information with one another. Id. at 4.
regulatory and policy initiatives regarding CRA activities and to facilitate dialogue between securities regulators and the CRA industry.

In November 2009, the EU published a regulation requiring the registration and oversight of CRAs. This regulation requires that all CRAs established in the EU seek authorization from relevant national authorities, and provides that only such CRAs can issue credit ratings.\textsuperscript{142} This regulation was augmented by a subsequent regulation in May 2011, which will be described below.\textsuperscript{143}

The United States then passed Dodd-Frank, which increased the SEC’s regulatory responsibilities with respect to CRAs and provided for heightened transparency of rating methodologies in structures and non-structured financial products.\textsuperscript{144} Among other things, Dodd-Frank imposes conflict-of-interest restrictions on CRA boards, prescribes the establishment of internal control structures,\textsuperscript{145} attempts to separate sales and marketing from ratings, and imposes new duties on CRA compliance officers.\textsuperscript{146} The SEC was directed to create a new Office of Credit Ratings, but lack of funding has thus far impeded this provision. In addition, Dodd-Frank sought to drastically reduce the importance of credit ratings in the financial system by requiring the removal of certain statutory references to credit ratings.\textsuperscript{147} New liability provisions for CRAs also were set forth.\textsuperscript{148}

In February 2011 IOSCO issued its Final Report on CRAs.\textsuperscript{149} This report declared a victory for IOSCO’s 2003 Principles on CRAs by claiming that “although the structure and specific provisions of CRA regulatory programs may differ, the objectives of the four

\textsuperscript{142} Regulation (EC) No. 1060/2001 on credit rating agencies
\textsuperscript{144} Dodd-Frank §§ 931-939H.
\textsuperscript{145} Exchange Act, § 15E(c)(3)(A).
\textsuperscript{146} Exchange Act, § 15E(j)(2)(B).
\textsuperscript{147} Dodd-Frank § 939. Unfortunately, these provisions conflict with the need for U.S. regulators to implement Basel III.
\textsuperscript{148} § 939G repealed the exemption of rating agencies from liability under § 11 of the Securities Act of 1933 so that NRSRS could be sued as “experts” for statements made in prospectuses and registration statements. But in the first offering to occur after Dodd-Frank was passed, the SEC waived this requirement because the rating agencies refused to consent to be named as experts and so a $1 billion Ford Motor Credit Company debt offering could not go forward. Ford Motor Credit Company LLC, SEC No-Action Letter (Nov. 23, 2010) (replacing July 22, 2020 letter), available at http://www.sec.gov/divisions/corpfin/cf-noaction2010/ford072210-1120.htm.
\textsuperscript{149} IOSCO, REGULATORY IMPLEMENTATION OF THE STATEMENT OF PRINCIPLES REGARDING THE ACTIVITIES OF CREDIT RATING AGENCIES (FINAL REPORT), FR02/11 (Feb. 2011).
IOSCO CRA Principles are embedded into each of the programs. In this report, IOSCO compared the implementation of CRA regulation in seven jurisdictions—Australia, Brazil, the EU, Japan, Mexico, Switzerland and the United States. Despite some of the differences among these countries’ regulatory programs and the different stages of implementation that they were in, IOSCO felt that all of them had implemented IOSCO principles. The report pointed out differences in each jurisdiction’s definition of “credit rating agency,” registration requirements, and enforcement authority. For example, while the EU, US, and Japan have definitions for “credit rating” and “credit rating agency” that build on each other, Australia defines only “credit rating” while Mexico defines only “credit rating agency.” Australia’s program compels registration of all CRAs operating in the country, EU requires CRAs to register with their home Member States, while the US requires a CRA to be registered as an NRSRO if the agency’s ratings were to be used for regulatory purposes.

This effort probably demonstrates that the level of generality of the IOSCO principles is such that implementation discrepancies can be explained away. Yet, it raises a question as to how influential IOSCO is in harmonizing regulations to avoid competitive races to the bottom among difference jurisdictions. Ironically, the three major CRAs are all U.S. companies, so differential regulations of CRAs is unlikely to prevent them from moving from the United States to other locations, unless the United States were to impose more stringent regulations than other jurisdictions. Rather, what could happen is that other jurisdictions, and in particular the EU, could attempt to break up this oligopoly or set up rival CRAs.

In May 2011, the EU published a Regulation on CRAs, amending its prior regulation that had assigned ESMA the task of registering and regulating CRAs. Although this regulation is similar to Dodd-Frank, in certain ways it goes further in attempting to reform the credit ratings process. Independence requirements for the CRA’s boards are specified and the board members must have expertise as well as independence. Their terms are limited to five years. Conflicts of interest must be identified and eliminated.

150 Id. at 3.
151 Id. at 13-17.
152 Id. at 13-14.
153 Id. at 14-15.
155 Regulation (EU) No. 513/2011, supra note ___.

25
Internal control mechanisms must be established. Consultancy or advisory services cannot be provided to issuers undergoing a rating.\textsuperscript{156}

The possibility that the EU will take stronger action against the CRAs than the United States is related to the ire the EU Commission and European governments have at the hedge funds for their role in the sovereign debt crisis in Europe. Although the CRAs have been castigated for failing to exercise stricter standards with regard to structured finance products, now they are being attacked for downgrading or threatening to downgrade sovereign debt. EU politicians have even floated the idea of creating a European foundation or agency to counter the dominance of the big three rating agencies. It is more likely that the EU will act to reduce investor reliance on credit ratings, which will mirror provisions of Dodd-Frank requiring U.S. regulators to eliminate references to ratings in their regulations.\textsuperscript{157}

In Hong Kong, CRAs are now subject to a new regulatory regime, which became effective on June 1, 2011.\textsuperscript{158} Under the new regime, CRAs and their analysts who provide rating services in Hong Kong are required to register with the SFC. The revised code is based on IOSCO’s Code of Conduct Fundamentals for CRAs, and the SFC believes that the new standard in Hong Kong will be consistent with the enhanced standards that have been adopted in a number of other jurisdictions.\textsuperscript{159} Also in an attempt to conform with international standards and practices, Singapore MAS put forward, in March 2011, a proposal on the regulation of CRAs.\textsuperscript{160} The proposed

\textsuperscript{156} Annex III. The SEC has proposed rules on the supervision, transparency, and integrity of credit ratings. Under the proposed rules, each NRSRO must: file an annual report with the SEC on its internal controls; prohibit employees who participate in the NRSRO’s sales or marketing to also participate in determining credit ratings; conduct a “lookback” review on former employees; publicly disclose additional information on the historical performance of its credit ratings on a uniform basis; and establish standards of training, experience, and competence for credit analysts. Proposed Rules for Nationally Recognized Statistical Rating Organizations, Exchange Act Release No. 64,514, 76 Fed. Reg. 10 (June 18, 2011).


regulatory regime would add “providing credit rating services” to the list of regulated activity under the Securities and Futures Act, thus requiring CRAs to be licensed. Similar to the regime in Hong Kong, the proposed Singaporean regime also includes a Code of Conduct for CRAs that is based largely on IOSCO’s Code of Conduct.

IOSCO has played the role of both a leader and a follower with regard to the improved regulation of CRAs. Since the two biggest CRAs are U.S. companies, and the third is a U.S. subsidiary of a French company, the regulation of CRAs is necessarily a primary concern of the SEC. Yet the activities of CRAs are world-wide and Europeans have been at least as unhappy with CRA responsibility for the 2008 financial crisis as U.S. politicians. Although IOSCO has taken its cue from the SEC to some extent in its efforts to advocate better regulation of CRAs, it has sometimes gotten in front of the SEC in promoting new regulatory initiatives. At other times it has followed the SEC and other jurisdictions in articulating new standards.

C. Short Sale Regulation

Regulation of short sales is another politicized topic. A short sale is the sale of any security the seller does not own or any sale consummated by the delivery of a borrowed security. A former SEC rule prohibited any person from effecting a short sale of any exchange listed security below the price at which the last sale of that security was reported. This was known as the “uptick” rule. It was rescinded in the summer of 2007 because the SEC believed it had become unnecessary with decimal pricing and the transparency and surveillance in exchange markets. Further, the widespread availability of options and derivatives had made the rule of questionable utility because it could be so easily evaded by trades in the futures markets. Nevertheless, after the financial crisis was triggered by the collapse of Bear Stearns, and Lehman Bros. began to fail, there was a hue and cry about short sellers and the SEC responded by prohibiting short sales in financial stocks.

Between July 21 and August 15 the SEC restricted short sales in nineteen financial stocks. After this emergency order expired, turmoil in the stock market continued, and financial firms claimed that their stocks were being pounded by short sellers. In September 2008 the SEC banned short selling in the stocks of 799 U.S. financial sector

161 Id.
companies, and later allowed the exchanges to add additional companies to the list.\textsuperscript{165} Nearly 1,000 stocks went on to this list, including CVS Caremark Corp., International Business Machines Corp., General Motors Corp., and General Electric Corp.\textsuperscript{166} The SEC also required hedge fund managers to disclose their short positions publicly, and announced that this requirement would be made permanent.\textsuperscript{167}

The SEC then banned “abusive naked short selling,” or short selling by persons who do not actually borrow stock to deliver against a sale, and fail to deliver stock to the buyer. By a temporary rule, on September 17, 2008, the SEC required short sellers and their broker-dealers to deliver securities by the close of business on settlement date and imposed penalties for failure to do so.\textsuperscript{168} The SEC made this ban permanent in July 2009.\textsuperscript{169}

The SEC’s bans on short selling were quickly copied in other jurisdictions.\textsuperscript{170} The U.K. banned short positions in 34 financial stocks until January 2009 and required daily disclosure of all net short positions.\textsuperscript{171} Other European countries also put in bans.\textsuperscript{172} Hong Kong enforced its up-tick rule that allowed shorting of shares that had risen in value and Singapore tightened its rules to discourage naked short selling.\textsuperscript{173} Australia banned naked short selling and required disclosure of other short selling.\textsuperscript{174}

The SEC’s short selling bans were criticized as making a volatile market worse—a “clumsy effort to buoy shares of battered financial stocks.”\textsuperscript{175} It appears that the SEC’s short sale bans cut the volume in the stocks on the no-short-sale list, resulting in wide price swings. Further, despite the bans, stocks including National City Corp. and Sovereign Bancorp Inc. suffered sharp declines; Washington Mutual Inc. and Wachovia

\begin{enumerate}
\item \textit{Id.: Short Selling (No. 2) Instrument 2008, FSA2008/50}.
\item Macintosh, supra note____.
\item ASIC, \textit{Naked Short Selling not Permitted and Covered Short Selling to be Disclosed},
\end{enumerate}
Corp. essentially failed. SEC Chair Cox later stated that he thought the SEC’s emergency short sale rules were a mistake.

The political pressure around the world to ban or at least mitigate short selling was responded to in a fairly measured way by IOSCO in a paper authored by IOSCO’s Technical Committee and issued in June 2009. This paper asserted that short selling plays an important and beneficial role in the market, but can also contribute to disorderly markets. The Committee does not define “short selling,” but believes that it is more pragmatic to look at whether a particular transaction is a short selling activity by looking at the nature of the transaction. If a transaction is a sale of stock that the seller does not own at the point of sale, then the Committee will deem such a transaction a short selling activity. In recognizing that the regulation of short selling varies substantially among its members, the Committee urges a more common approach and recommends that market authorities develop short selling regimes based on four principles described below.

The first principle is that short selling should be subject to appropriate controls to reduce or minimize the potential risks that could affect the orderly and efficient functioning and stability of financial markets. Some jurisdictions already employ a variety of measures and controls designed to counter the risks of short selling, however, the Committee recognizes that not all of these measures are appropriately applicable across borders. To discourage and deter abusive short selling behavior, the Committee instead recommends that regulation impose a strict settlement of failed trades, in other words, outlaw naked short selling.

IOSCO’s second principle with regard to short selling is that such selling should be subject to a reporting regime that provides timely information to the market or to market authorities. While the Committee believes that regulators should aim to

\[^{176}\text{Id. at C7.}\]
\[^{177}\text{Rachelle Younglai, SEC chief has regrets over short-selling ban, Reuters, Dec. 31, 2008.}\]
\[^{178}\text{Regulation of Short Selling (June 2009)}\]
\[^{179}\text{Id. at 4.}\]
\[^{180}\text{Id. at 7.}\]
\[^{181}\text{Id. at 23.}\]
\[^{182}\text{Id. at 7-8.}\]
\[^{183}\text{Some jurisdictions achieve this by compulsory buy-in or close-out, while some impose monetary penalty on market participants. A short settlement cycle can also help in reinforcing settlement discipline – IOSCO and CPSS recommends a T+3 settlement cycle – and the Committee strongly encourages market authorities to consider implementing these recommendations of strict settlement requirements while taking into account domestic conditions. In addition to strict settlement requirements, other tools that authorities should consider include eligibility criteria for stocks that can be short sold; pre-borrowing or “locate” requirements; price restriction rules; or the “flagging” of short sales. Id. at 9-10.}\]
\[^{184}\text{Id. at 10.}\]
promote appropriate transparency of short selling information to the market, it also recognizes that information on short selling may mislead the market and that increasing transparency might expose short sellers and subject them to a potential short squeeze. The Committee thus urges regulators to carefully address the objective of the transparency regime for short sales.\(^{185}\)

As might be expected, IOSCO’s third principle relates to enforcement. It is that short selling should be subject to an effective compliance and enforcement system in order to instill settlement discipline and minimize the potential for settlement disruption risk, the Committee believes that there must be strict settlement of failed trades. To do so, the Committee encourages authorities to consider whether they can extend the power to require information from not only persons and entities that are domestically licensed, but also parties suspected of breach that may not be licensed or registered.\(^{186}\) Furthermore, the Committee encourages cross-border enforcement cooperation using several tools and frameworks that IOSCO has already created and put in place.\(^{187}\)

As discussed above, the Committee believes that short selling has certain benefits and it facilitates market development. Accordingly, IOSCO’s fourth principle is that short selling regulation should allow appropriate exceptions for certain types of transactions for efficient market functioning and development. The Committee thus envisages a short selling regulatory regime where more flexibility is given to short selling activities that are critical to the efficient functioning of capital markets and the orderly development of the market for better risk management – activities such as bona fide hedging, market making, and arbitrage. Although these activities may be exempt from restrictions, the Committee does not believe they should be exempt from reporting requirements and urges authorities to clearly define what falls under exempted activities.\(^{188}\)

\(^{185}\) Id. at 11-12. Specifically, the Committee recommends regulators to consider these objectives: provide ready access to information on short selling to improve insight into market dynamics; deter market abuse; mitigate the potential disorderly market effects of aggressive short selling; provide early warning signs of build-up of large short positions and alerts to prompt investigation; and provide evidentiary proof that aids in post-event investigation and disciplinary action. In addition, the Committee discusses and makes recommendations with regards to what should be required to be reported, the frequency of such reporting, the trigger level of reporting, the constituents responsible for reporting, and the recipients of these reports. Finally, with regards to the reporting models – flagging of short sales versus short positions reporting – the Committee believes that it may be easier for national market authorities to monitor compliance with the first method because brokers can be held accountable for any failure to report short sales. Id. at 12-15.

\(^{186}\) Authorities should also use the surveillance data collected from either the flagging of short sales or the short positions reporting methods to analyze and identify potential market abuses and systemic risk. Id. at 16-17.

\(^{187}\) Id. at 17.

\(^{188}\) Id. at 18-19.
Although enormous political pressure was brought to bear on the SEC to reinstate the up-tick rule,\textsuperscript{189} the SEC instead adopted a circuit breaker rule that would apply only during a severe price decline in a particular security.\textsuperscript{190} The SEC’s short sale rule goes into effect on a day when the price of an individual security declines intra-day by 10% or more from the prior day’s closing price of that security as determined by the security’s listing market. In such an event, the rule imposes an uptick rule for the remainder of the day and the following day prohibiting short sellers from selling at or below the current national best bid while the circuit breaker is in effect. The SEC rejected its own proposal that the uptick rule could be based on the last sale price on the ground that the national best bid is more suitable to today’s markets.

Under the rule, broker-dealers must mark all sell orders of an equity security “long,” “short,” or “short exempt.” Once the circuit breaker has been triggered, a broker-dealer may execute certain “short exempt” sales, but in order to do so, the order must be so marked and the short sale must, at the time of its submission to a trading center, be priced above the national best bid. Further, broker-dealers must establish, maintain, and enforce written policies and procedures that are reasonably designed to prevent the incorrect identification of “short exempt” orders. There are certain other limited exceptions to the rule, which include an owner whose delivery is delayed, odd lot transactions and domestic and international arbitrage transactions. But there is no exception for market making activity. Market centers are required to institute policies and procedures to ensure that orders are not displayed or executed contrary to the rule. These new procedures need to include mechanisms to avoid the display of impermissibly priced sale orders and the display and execution of “short exempt” orders. But if an order is improperly priced, the trading center can re-price it upwards or hold it.

The short sale rule applies only to “covered securities,” which generally are securities trading on a national securities exchange. The rule will not apply to non-national market system securities, options or derivatives. The SEC recognized that parties can obtain a short position through the use of derivative products and such synthetic short positions may undermine the goals for adopting the new short sale rule. But the SEC’s former short sale rule also did not apply to derivative products and the SEC lacks the authority to extend the short sale rule to such products if they are financial futures.

\textsuperscript{189} Mary Schapiro, President Obama’s appointee for Chairman of the SEC, represented in her Senate confirmation hearing that she would quickly examine whether the up-tick rule should be restored. Stephen Labaton, \textit{S.E.C. Nominee Offers Plan for Tighter Regulation}, \textit{N.Y. Times}, Jan. 16, 2009, at B3.
The general policies behind the rule are to allow long sellers to sell first in a declining market; to facilitate and maintain stability in the markets and help insure they function efficiently; and to help restore investor confidence in times of substantial uncertainty. The narrow reach of the rule demonstrates the SEC’s own skepticism as to the merits of a new short sale rule, in the face of the SEC’s recognition that short selling benefits market liquidity and pricing efficiency. The SEC had already banned naked short selling.

The SEC’s actions were consistent with IOSCO’s principles and short sale regulations in other jurisdictions. By 2010, many regulators had decided to regulate short selling through disclosure. On March 2, 2010 CESR\(^{191}\) issued a recommendation to the European Commission\(^{192}\) to implement a pan-European short selling disclosure regime.\(^{193}\) As proposed, the regime will require investors to reveal big short-selling positions to regulators and empower an EU watchdog to ask for sensitive information and temporarily stop short-selling.\(^{194}\) EU countries will, however, be allowed veto such a ban. If both parliament and EU member countries reach agreement, the law could be in place by the end of this year. Hong Kong has also announced that it will implement a short position reporting regime.\(^{195}\) Under the new regulations “market participants will have to disclose any short position that is equal to or greater than 0.02 per cent of the issued share capital of a listed company, or a market value of HK$30m ($3.8m), whichever is lower.”\(^{196}\)

Railing against short sellers seems to be shooting the messenger rather than listening to the message, but many observers believe that abusive short selling drove down the prices of financial stocks in 2008. But the problem of leverage in the bull market that preceded the 2008 market collapse was a more serious cause of the financial meltdown than eliminating the uptick rule. Further, there is no way to reinstate a meaningful uptick rule without limiting derivatives on stocks. The AIG credit default swaps debacle\(^{197}\) demonstrates that a short sale rule for bonds may also be justified if a new short sale rule for stocks is promulgated.

Although IOSCO generally has responded to the financial crisis by recommending principles or standards that increase regulation, in the case of short selling, IOSCO’s

\(^{191}\)CESR was the Committee of European Securities Regulators, now replaced by ESMA.

\(^{192}\)This is the European Union’s Executive branch.


\(^{196}\)Id.

\(^{197}\)See FINANCIAL CRISIS INQUIRY REPORT at 50-51, 344-45.
response was to limit political pressures for either absolute bans on short selling or an up-tick rule. Instead, IOSCO opted to recommend restrictions on failed trades, which in effect bans naked shorting, and to recommend disclosure.

Considering how ineffective the short sale bans were in 2008, it is surprising that regulators in Europe re-imposed short sale bans on bank stocks in the summer of 2011 in the midst of the sovereign debt crisis.198 ESMA implemented the ban in Belgium, France, Italy, and Spain and some have argued that “short-selling prohibitions (were) better co-ordinated and more tailored than those imposed after the 2008 collapse of Lehman Brothers.”199 Others sharply criticized the measures as an ineffective waste of resources and drain on market efficiency.200 It is worth noting that Germany and the United Kingdom declined to participate in the short selling ban.

As the sovereign debt crisis continues to rage in Europe, the EU has taken steps to make the increased regulation of short selling a permanent fixture in the region’s financial markets. At the member-state level, France has extended its ban on short sales in the shares of ten French financial firms, including behemoths Société Générale and BNP Paribas.201 At the EU level, on November 15, 2011, the European Parliament approved the final text of the Regulation on Short Selling and certain aspects of Credit Default Swaps (the “Regulation”).202 The Regulation, subject to being formally approved by the EU Council, will come into effect on November 1, 2012, and will introduce restrictions and disclosure requirements on short selling EU shares and sovereign bonds and prohibit naked or uncovered credit default swaps relating to EU sovereign debt.203 These new restrictions and disclosure requirements will be enforced by ESMA.204

For the shares of EU corporations, the Regulation requires natural or legal persons to privately notify financial regulators if they accumulate “net short positions” above 0.2 percent of the issued share capital of an issuer and further notifications at each further

198 Brooke Masters, European short-selling ban comes under attack, FINANCIAL TIMES, Aug. 12, 2011, http://www.ft.com/intl/cms/s/0/763a185e-c4e1-11e0-9c4d-00144feabdc0.html#axzz1WWr4Q91Z.
199 Id.
200 Id.
202 Council Common Position (EC) No. 16338/11 of 4 November 2011 (hereinafter EU Short Sale Regulation)
204 Id.
0.1 percent increment.\textsuperscript{205} If such position crosses 0.5 percent, the investor must publicly disclose its existence and make further public disclosures for each additional 0.1 percent increment.\textsuperscript{206} These disclosures must also include the identity of the person holding the net short position.\textsuperscript{207} The Regulation has similar disclosure requirements regarding short positions in the sovereign debt of EU countries; however, the required disclosure is only made to financial regulators and will never become public.\textsuperscript{208} The Regulation does not provide criteria for when the disclosure requirement is triggered with regards to sovereign debt as “ESMA shall publish on its website the notification thresholds for each Member State”.\textsuperscript{209}

The remaining portion of the Regulation institutes a ban on naked short sales involving the shares of EU corporations and EU sovereign debt. The Regulation prohibits a natural or legal person from entering a short sale unless one of the following conditions is satisfied:

(a) the natural or legal person has borrowed the share; or has made alternative provisions resulting in a similar legal effect;
(b) the natural or legal person has entered into an agreement to borrow the share or has another absolutely enforceable claim under contract or property law to be transferred ownership of a corresponding number of securities of the same class so that settlement can be effected when it is due;
(c) the natural or legal person has an arrangement with a third party under which that third party has confirmed that the share has been located and has taken measures vis-à-vis third parties necessary for the natural or legal person to have reasonable expectation that settlement can be effected when it is due.\textsuperscript{210}

The ban on naked short sales involving EU sovereign debt is identical to the one covering corporate shares except for two important distinctions. First, there has been a textual change to (c), which reads as follows: “the natural or legal person has an arrangement with a third party under which that third party has confirmed that the sovereign debt has been located or has otherwise reasonable expectation that settlement can be effected when it is due.”\textsuperscript{211} The switch from “and” to “or” in (c)

\begin{itemize}
\item \textsuperscript{205} EU Short Sale Regulation at Art. 5.1–5.2.
\item \textsuperscript{206} Id. at Art. 7.1–7.2.
\item \textsuperscript{207} Id.
\item \textsuperscript{208} Id. at Art. 8.1–8.2.
\item \textsuperscript{209} Id.
\item \textsuperscript{210} Id. at Art. 12.1.
\item \textsuperscript{211} Id. at Art. 12a.3 (emphasis added).
\end{itemize}
provides market participants more freedom to short EU sovereign debt than the EU corporate shares. The second difference is a provision allowing the ban to be suspended if “liquidity of sovereign debt falls below the threshold determined in accordance with (the Regulation)”. These two important differences are likely a response to the fear that a more aggressive short sale ban could erode liquidity in the EU sovereign debt markets if investors felt they were unable to adequately hedge their positions.

The EU, recognizing that “(b)uying credit default swaps without having a long position in underlying sovereign debt ... can be, economically speaking, equivalent to taking a short position on the underlying debt instrument”, has also included a ban on uncovered credit default swaps referencing EU sovereign debt. Under the Regulation, a credit default swap is considered “uncovered” unless it serves as a hedge against:

(a) the risk of default of the issuer where the natural or legal person has a long position in the sovereign debt of that issuer to which the sovereign credit default swap relates, or
(b) the risk of a decline of the value of the sovereign debt where the natural or legal person holds assets or is subject to liabilities, including but not limited to financial contracts, a portfolio of assets or financial obligations the value of which is correlated to the value of the sovereign debt.

As with the naked short sale ban on sovereign debt, the ban on uncovered credit default swaps can be temporarily suspended if a country’s financial authority believes its “sovereign debt market is not functioning properly and that such

\[12a.1b\]
\[Introduction (13)\]
\[Art. 4\]
\[The Regulation lays out the following criteria for a country’s financial regulator to consider when making this determination:

(a) high or rising interest rate on the sovereign debt;
(b) widening of interest rate spreads on the sovereign debt compared to the sovereign debt of other sovereign issuers;
(c) widening of the sovereign credit default swap spreads compared to the own curve and compared to other sovereign issuers;
(d) timeliness of the return of the price of the sovereign debt to its original equilibrium after a large trade;
(e) amounts of sovereign debt that can be traded.
restrictions might have a negative impact on the sovereign credit default swap market, especially by increasing the cost of borrowing for sovereign issuers or affecting the sovereign issuers’ ability to issue new debt.” Once again, the insertion of this provision shows the tension between limiting short selling and ensuring market liquidity.

The discrepancies between IOSCO’s recommendations, the U.S. regulation of short selling, and the bans on short selling in Europe demonstrate a failure of international regulation. Where national regulators perceive a strong national interest in a regulatory reaction to a problem in the capital markets, they go their own ways. The global marketplace is then left to cope with inconsistent regulation however it can, either by moving trades to less regulated jurisdictions or inventing synthetic securities to mimic outlawed transactions. While IOSCO can recommend approaches to problems, it does not have the clout to impose those approaches on jurisdictions that choose to approach the problems differently.

D. The Flash-Crash, High Frequency Trading (“HFT”), and Dark Pools

As regulators scrambled to address the issues surrounding hedge funds, credit rating agencies and short selling in the wake of the 2008 Financial Crisis, they were confronted with yet another set of issues stemming from the market events of May 6, 2010, commonly referred to as the “Flash-Crash” (“Flash-Crash”). On that day, when U.S. stocks were already down 5 per cent, around 2:40 p.m. the market began to plummet. Shares in Proctor & Gamble fell 37 per cent; shares of Accenture slid from $40 a share to trade at one cent. At one point, the Dow Jones average was down 998.50 points – its biggest intraday point drop ever. Eventually the market bounced back to close down 347.80 points, or 3.2%, at 10,520.32. Despite this late recovery, the extreme volatility exhibited during the Flash-Crash compelled regulators to investigate what had caused the extreme price movements.

Id. at Art. 12b.2.


According to the joint SEC-CFTC Report on the Flash-Crash (the “Report”), the chain of events that day leading to the crash began at 2:32 p.m. when, against a backdrop of unusually high volatility and thinning market liquidity, a mutual fund firm used an algorithm to sell a total of 75,000 E-Mini contracts (worth approximately $4.1 billion) to hedge an existing equity position. To execute the trade, the fund employed a sell algorithm that targeted trading volume, without any consideration for price or timing, selling the entire block extremely rapidly in just 20 minutes. This sell pressure was initially absorbed by the market and most notably high frequency traders, which traded nearly 140,000 E-Mini contracts or over 33% of the total trading volume. Like a run-away train, the sell algorithm responded to the increased volume coming from high frequency traders and other entities by increasing the rate at which it fed the orders into the market, even though orders that it already sent to the market were arguably not yet fully absorbed by market participants.

The Report frames the Flash-Crash in terms of two separate liquidity crises. The first crisis was in the derivatives market where the combined pressure of the mutual fund’s sell algorithm and the response of high frequency trading (“HFT”) algorithms employed by other traders drove the price of the E-Mini down approximately 3% in just four minutes. Traders using HFT proceeded to quickly buy and then resell contracts to each other, leading to a “hot-potato” volume effect as the same positions were rapidly passed back and forth. In just 13 minutes, as prices of the E-Mini rapidly declined, the mutual fund’s sell algorithm sold about 35,000 E-Mini contracts (valued at


222 An E-mini is an electronically traded futures contract on the Chicago Mercantile Exchange that represents a portion of the normal futures contracts. E-mini contracts are available on a wide range of indexes such as the Nasdaq 100, S&P 500, S&P MidCap 400 and Russell 2000. See http://www.investopedia.com/terms/e/emini.asp#axzz1XIGY8oDZ.

223 Market Events Report, supra note __, at 2.

224 Id.

225 Id. at 3.

226 Id. at 3.

227 Id. at 3.

228 Id. Between 2:45:13 and 2:45:27, high frequency traders traded over 27,000 contracts, which accounted for about 49 percent of the total trading volume, while buying only about 200 additional contracts net.
approximately $1.9 billion). During the same time, all fundamental sellers combined sold more than 80,000 contracts net, while all fundamental buyers bought only about 50,000 contracts net, for a net fundamental imbalance of 30,000 contracts.

The second liquidity crisis started in the equities markets four minutes after the volatility started in the futures markets. As the sell-off in E-mini contracts accelerated, cross-market arbitrageurs who bought the E-Mini, simultaneously sold equivalent amounts in the equities markets, driving the price of SPY down approximately 3%. In addition to this sell-side pressure, liquidity in the equities markets eroded as a variety of large market participants paused trading, widened their quote spreads, limited offered liquidity, or withdrew completely from the markets. As liquidity completely evaporated in several individual securities and ETFs, trades were executed at irrational prices as low as one penny or as high as $100,000. Even more extraordinary was the fact that over 20,000 trades representing 5.5 million shares were executed at prices more than 60% away from their 2:40 p.m. value. A majority of those trades were driven by sell orders from retail customers sent to broker-dealers for immediate execution at then-current market prices. Broker-dealers, in turn, routed these orders to the public exchanges for execution at then-current national best bid and national best

229 Id. at 4. By 2:45:28 there were less than less than 1% of buy-side market depth observed at the beginning of the day. At the same time, buy-side resting orders in SPY fell to approximately 25% of its depth at the beginning of the day.

230 Id. This level of net selling was about 15 times larger compared to the same 13-minute interval during the previous three days, while this level of net buying was about 10 times larger compared to the same time period during the previous three days.

231 Id.

232 SPY is an ETF that seeks to replicate, net of expenses the S&P 500 index. The index is composed of 500 selected stocks, and spans over 24 separate industry groups. It is heavily weighted towards stocks with large market capitalizations and represents approximately two-thirds of the total market value of all domestic common stocks. The fund holds all of the S&P 500 index stocks. http://finance.yahoo.com/q/pr?s=SPY+Profile

233 Id. at 3.

234 Id.

235 Id. Some fell back to manual trading but had to limit their focus to only a subset of securities as they were not able to keep up with the nearly ten-fold increase in volume that occurred as prices in many securities rapidly declined.

236 Id. These trades occurred as a result of so-called stub quotes, which are quotes generated by market makers (or the exchanges on their behalf) at levels far away from the current market in order to fulfill continuous two-sided quoting obligations even when a market maker has withdrawn from active trading. Id.

237 Trade and order data revealed that one large internalizer (as a seller) and one large market maker (as a buyer) were party to over 50% of the share volume of broken trades, and for more than half of this volume they were counterparties to each other (i.e., 25% of the broken trade share volume was between this particular seller and buyer).

238 Id. at 67.
However, for those securities in which market makers had withdrawn their liquidity, there was insufficient buy interest, and many trades were executed at very low or very high prices, including stub quotes. These trades were subsequently broken by the exchanges and FINRA under their clearly erroneous rules because they were executed at clearly unrealistic prices under severe market conditions.

While the Report finds that the mutual fund’s massive sale of E-mini contracts via a selling algorithm initially triggered the Flash-Crash, it falls short of singling out any specific cause or set of causes for the extreme market movements observed that day. The Report does acknowledge the role of HFT, noting that “the automated execution of a large sell order can trigger extreme price movements, especially if the automated execution algorithm does not take prices into account” and that “the interaction between automated execution programs and algorithmic trading strategies can quickly erode liquidity and result in disorderly markets.” The Report also notes that the ensuing sudden decline in both price and liquidity are symptomatic of rapid price movement, such that fundamental buyers and cross-market arbitrageurs were either unable or unwilling to supply enough buy-side liquidity. Though not directly mentioned in the Report, current SEC Chairperson Mary Schapiro also implicated dark pools as one of the causes of the Flash-Crash, stating “[t]he continuing growth of trading in dark pools and other types of dark venues can challenge the quality of the market’s price-discovery function. And the complexity of the market structure sometimes makes it difficult for even sophisticated investors to pursue their own best interests.” Regardless of the specific cause, the Flash-Crash illustrates the interconnectedness of the derivatives and securities markets, rendering the potential

\(^{239}\) Market Events Report, supra note __, at 68.

\(^{240}\) Market Events Report, supra note __, at 68.

\(^{241}\) Id. at 65. Almost two-thirds of shares in cancelled trades were executed at prices of less than $1.00, and about 5% were executed at prices above $100. In summary, broken trades on May 6 were concentrated primarily among a few market participants.

\(^{242}\) Market Events Report, supra note __, at 2. The execution of this sell program resulted in the largest net change in daily position of any trader in the E-Mini since the beginning of the year (from January 1, 2010 through May 6, 2010). Only two single-day sell programs of equal or larger size – one of which was by the same large fundamental trader – were executed in the E-Mini in the 12 months prior to May 6. Market Events Report, supra note __, at 2.

\(^{243}\) Id.

\(^{244}\) Id. in the four-and-one-half minutes from 2:41 p.m. through 2:45:27 p.m., prices of the E-Mini had fallen by more than 5% and prices of SPY suffered a decline of over 6%. At the same time, cross-market trading firms were purchasing the E-Mini and selling either SPY, baskets of individual securities, or other index products. Id.

impact of HFT and Dark Pools under those conditions very broad.246 Accordingly, in the aftermath of the Flash-Crash, IOSCO and other regulators around the world have set out to address these issues.

1. Direct Electronic Access

The Flash-Crash was in some ways similar to the 1987 stock market crash but occurred much more quickly.247 One development that happened between 1987 and 2010 to cause this increased pace was advances in trading technology. In the 1990s, with the blessing of regulators around the world, the industry moved rapidly to computerize exchanges.248 Some brokerage firms created computerized trading systems by which customers could enter orders through their own computers.249 In 1993, the Integrated Technology Plan was implemented on trading floor networks, computerizing every aspect of trading floor operations.250 In 1996, NYSE launched real-time stock tickers on CNBC and CNN-FN.251 The following year, the Wireless Data System allowed brokers to receive orders, access market information and transmit execution reports from any location on the trading floor.252 At the same time, the securities industry began trading in increments of sixteenths in 1997, and then went to decimal trading in 2001.253 Of all these developments, one of the most important is the rise of direct electronic access ("DEA") because without it neither HFT nor Dark Pools would be possible. DEA is defined by IOSCO as a "process by which a person transmits orders on their own (i.e., without any handling or re-entry by another person) directly into the

246 Market Events Report, supra note ___, at 2. The cross-market trading activity was particularly influenced by the volatility in the "price discovery" products such as the E-Mini and SPY.
249 ELECTRONIC BULLS AND BEARS, supra note ___, at 140.
250 Timeline-Technology, supra note ___.
251 Id.
252 NYSE spent over $1 billion on technology between 1982 and 1995, allowing it to cut order execution time dramatically and to handle daily order flows in excess of 1.4 billion shares.
market’s trade matching system for execution.” The NYSE first offered DEA in 2000 under a pilot program named NYSE Direct+, which it has significantly expanded since. DEA is crucial to the Flash-Crash story, first, because it provides HFT trading programs access to the securities markets, and second, because it links the various exchanges where securities are traded.

IOSCO has correctly highlighted DEA as an issue, and published its first report on the topic, *Principles for Direct Electronic Access to Markets* (“Final Report”), in August 2010. The Final Report was largely a continuation of a February 2009 Consultation Report by the IOSCO Technical Committee that had identified three key elements to be considered in relation to DEA: pre-conditions for DEA; information flow; and adequate systems and controls. Based on the guidance given by the consultation report, the Final Report sets forth principles for DEA, a key aspect of which is to provide that neither markets nor intermediaries should offer DEA unless adequate pre-trade information is provided, and that both regulatory and financial controls are in place to allow intermediaries to implement appropriate risk limits. The Committee concluded that the need for markets and intermediaries to make available and utilize these automated controls rests on the following basic proposition:

> Whatever level of risk a firm accepts, it must never be infinite. Rather, the risks undertaken must be limited to an appropriate level commensurate with the capital and other financial resources of the firm and the prudent management of both credit risk and any risk to fair and orderly trading. In an automated trading environment, the only controls that can effectively enforce such limits are automated controls.

IOSCO formulated eight principles for DEA arrangements, which are grouped into three key areas: pre-conditions for DEA; information flow; and adequate systems and controls. The first principle covers minimum customer standards and provides that intermediaries should require DEA customers: (1) to have appropriate financial resources; and (2) to have appropriate procedures in place to assure that all relevant persons are familiar with, and comply with, the rules of the market and have knowledge and proficiency in the use of the order entry system used by the DEA customer. Further,

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255  Timeline-Technology, *supra* note____.
256  DEA Principles at 2.
257  Id. at 3.
258  Id. at 3-4.
259  Id. at 4.
260  Id. at 17.
market authorities should have rules in place to require the adoption of these standards.\textsuperscript{261}

The second principle is that there should be a recorded, legally binding contract between the intermediary and the DEA customer, the nature and detail of which should be appropriate to the nature of the service provided. Further, each market should consider whether it is appropriate to have a legally binding contract or other relationship between itself and the DEA customer.\textsuperscript{262}

The third principle is that the intermediary should retain ultimate responsibility for all orders under its authority, and for compliance of such orders with all regulatory requirements and market rules.\textsuperscript{263} In those jurisdictions where a DEA customer is permitted to sub-delegate its direct access privileges to another party (a sub-delegatee), the intermediary should continue to be ultimately responsible for all orders entered under its authority by the sub-delegatee and should require the sub-delegatee to meet minimum standards set for DEA customers in general. There should be a recorded, legally binding contract between the DEA customers and the sub-delegatee, the nature and detail of which should be appropriate to the nature of the service provided. This principle is related to the fourth principle that intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA customers in order to facilitate market surveillance. In those jurisdictions where sub-delegation is permitted, the intermediary also should assume such responsibility to the market authorities with respect to any sub-delegatees.\textsuperscript{264}

The fifth principle is that markets should provide member firms with access to relevant pre- and post-trade information (on a real time basis) to enable these firms to implement appropriate monitoring and risk management controls.\textsuperscript{265}

The sixth, seventh and eighth principles require a market to ensure systems and controls reasonably designed to enable the management of risk with regard to fair and orderly trading as a condition for DEA trading; require intermediaries to use controls to limit or prevent a DEA customer from placing an order that exceeds a relevant intermediary’s existing position or credit limits; and require intermediaries and markets to have adequate operational and technical capabilities to manage appropriately the risks posed by DEA.\textsuperscript{266}

\textsuperscript{261} Id. at 18-19.
\textsuperscript{262} Id. at 18.
\textsuperscript{263} Id. at 19.
\textsuperscript{264} Id.
\textsuperscript{265} Id. at 20.
\textsuperscript{266} Id. at 20-22.
In addition to IOSCO, the SEC has also turned its attention to the issues surrounding DEA, starting with the adoption of Rule 15c3-5 on November 3, 2010. 267 This rule is designed to stop broker-dealers from allowing DEA to customers without any pre-trade supervision, a practice known as “naked access”. 268 Under the new rule, broker-dealers must scrutinize customers’ credit positions before the trade and stop reckless orders before they are executed. 269

2. High Frequency Trading

DEA allows market participants to submit orders to the trading venue to buy or sell securities by utilizing automated trade matching programs run by exchange intermediaries. At the heart of these programs are algorithms that attempt to match trades in the most efficient way possible. However, arbitrageurs, who are non-exchange intermediaries, employ a different group of algorithms that are designed to profit from market-making type functions in the exchanges’ electronic environment. 270 Most of these algorithms profit from buying and selling an exchange’s standardized product as quickly as possible, 271 though some algorithms profit from long-term market movements. 272 HFT is a type of algorithmic trading that employs highly sophisticated equations designed to conduct trading in rapid and continuing bursts in order to take advantage of the narrowest market disparities. HFT has become widespread, accounting for roughly 50% of trading volume by mid-2009. 273

Prior to the flash-crash, the SEC recognized that HFT presented an array of regulatory issues, including: co-location, the risks of naked/sponsored access, and the SEC’s means of collecting information about the orders and transactions of large traders that are not necessarily registered broker-dealers. 274 The SEC noted that some high-frequency trades could be executed anonymously on the exchanges, such that retail traders were being excluded from this trading, 275 which could disrupt or cause market

267 17 C.F.R. § 240.15c3-5(b) (2010).
269 Id.
272 Id.
problems because the exchanges do not know the identity of the traders.276 Another worrisome practice that was highlighted were “flash orders”, which involve high speed, brief posting of quotes by high frequency traders.277 Finally, the average computer glitches or “fat-finger” errors at naked access firms could disrupt the entire market.278

Though the SEC-CFTC Report did not squarely lay the blame for the Flash Crash on HFT, it expressly states that under stressed market conditions the automated execution of a large sell order can trigger extreme price movements, especially if the automated execution algorithm does not take prices into account.279 Furthermore, the Report noted that the interaction between automated execution programs and algorithmic trading strategies can quickly erode liquidity and result in disorderly markets.280 One crucial take away from the Report is that traders using HFT continued to execute automated algorithms, and likely perpetuated the volatile price movements that their algorithms were designed to hedge against and even to profit from.281 In contrast, traders that weren’t using HFT paused, slowed down or refrained from trading altogether during the crash. The Report attributes this difference to data integrity risk, which in the context of a flash crash is better understood as a challenge facing market participants in interpreting what is happening across the exchanges in real-time. Traders that do not utilize HFT are more likely to pause when faced with data integrity risks because they maintain human judgment over trading. While some HFT algorithms attempt to recreate this element of human judgment, the Report amply shows that this is not the case with the majority of automated high frequency algorithms as most traders using HFT continued to execute trades as the market rode the downward spiral.

The data integrity risks are especially acute with HFT because of its heavy emphasis on speed. Micro- and nano-seconds in transmission time can make a big difference in returns; therefore, HFT operations seek the smallest advantages by doing things such as co-locating with exchange servers to cut down transmission times.282 Another way to increase speed is to use the least amount of code possible when designing the trading program so that the computer can process it more quickly. One drawback of this approach is that too much code could be taken out so as to leave the trading

277 HAZEN & MARKHAM, supra note ___.
279 Market Events Report, supra note ___, at 68.
280 Id. at 6.
281 See notes 69-72 and accompanying text supra.
282 HAZEN & MARKHAM, supra note ___.

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program without the ability to effectively gauge what is happening in the market or without appropriate trading limitations. The need for speed has also led to the development of services that take news stories and information from social media sites and translate them into data a HFT algorithm can understand and use to make trading decisions.\footnote{Tom Steinert-Threlkeld, Machine-Readable Tweet Streams for Algos Arrive, \textit{SecuritiesTechnologyMonitor.com}, November 17, 2011, http://www.securitiestechmonitor.com/news/machine-readable-tweet-streams-algo-trading-gnip-29578-1.html?ET=securitiesindustry:e3039:180629a:&st=email&utm_source=editorial&utm_medium=email&utm_campaign=STM_BNA_08302010_111711.} If the proliferation of these services continues, the role played by humans in trading will continue decline, potentially creating further systemic risk due to data integrity risk.

After the flash crash, the SEC and FINRA instituted market-wide circuit breakers that apply across all equity trading venues and the futures markets, as none of the circuit breakers previously in place were triggered on May 6.\footnote{Market Events Report, supra note _____, at 6.} The SEC and FINRA have also indicated that market participants should move toward a more uniform procedure for trading pauses based on different combinations of market signals as the markets events show that pausing a market can be an effective way of providing time for market participants to reassess their strategies and for an orderly market to be re-established.\footnote{Id. at 6.} Additionally, rules will have to be developed to deter market conditions that lead to multiple market participants withdrawing simultaneously as this can lead to the breakdown of a fair and orderly price-discovery process.\footnote{Id. at 5. The extreme case is where trades are executed at stub-quotes used by market makers to fulfill their continuous two-sided quoting obligations.}

In February 2011, the joint advisory committee to the SEC and CFTC issued recommendations for regulatory responses to the flash crash.\footnote{Joint CFTC-SEC Advisory Committee on Emerging Regulatory Issues, Recommendations Regarding Regulatory Responses to the Market Events of May 6, 2010 (Feb. 8, 2011).} The joint committee concurred with the steps the SEC took to create single stock pauses or circuit breakers for the Russell 1000 stocks and actively traded ETFs and to enact rules to determine which trades will be broken when there are multi-stock aberrant price movements.\footnote{Id. at 4.} The Committee recommended, however, that these pause rules be expanded and adjusted in certain respects.\footnote{Id. at 5-6.} The Committee then went on to discuss restrictions on co-location and direct access and urged the SEC to work closely with FINRA and other exchanges with examination responsibilities to develop effective testing of sponsoring
broker-dealer risk management controls and supervisory procedures. Further, the Committee encouraged the CFTC to prohibit trading and quoting practices that were disruptive of fair and equitable trading, in particular large order algorithms that employ unlimited use of market orders.

An argument could be made that HFT is moving the markets away from their traditional roles of price discovery and value creation for investors, and capital formation for America’s economy. Because high frequency traders do not have the same market capabilities or opportunities, growth of HFT could be creating a two-tiered market—one for high frequency traders and another for everyone else. As illustrated by the market data integrity risks, the trading during flash-crash had no informational value for price discovery to investors that weren’t using HFT strategies. More than a year after the flash crash and the CFTC-SEC Report on its causes, HFT continues to be controversial with strong critics and defenders.

3. Dark Pools

A dark pool is any pool of liquidity that can be accessed electronically and provides no pre-trade transparency regarding the orders that are received by the pool; while a “dark order” refers to an electronic order that can be automatically executed and for which there is no pre-trade transparency. Some large market participants prefer dark pools because they allow investors to keep orders secret so that other market participants cannot detect large transactions and exploit them.

Dark pools are operated as off-exchange trading venues in the form of electronic communications networks (“ECNs”). ECNs entered the financial markets as a significant force beginning in the early 1990s. Regulators often refer to ECNs as automated trading systems (“ATSs”) because they match trades using computers and sophisticated

290 Id. at 7.
291 Id. at 8.
293 IOSCO, PRINCIPLES FOR DARK LIQUIDITY (May 2011).
294 For an example of exploitation consider an institutional buyer, such as a large pension fund, that wishes to purchase a large amount of stock. Other traders, noticing the increased demand for this certain security due to the pension fund accumulating the position, may buy the stock as well in hopes that the pension fund will continue to buy and they will be able to sell the stock to the fund at a profit, which effectively raises the price of the security for the pension fund.
Previously, traditional exchanges had employed algorithms for their own trading activities but trade-matching algorithms became the cornerstone of the development and competitive advantage of ECNs as major algorithms allow for anonymity of market users, speed, and liquidity capacity. As detailed in the SEC’s 2010 Market Structure Concept Release, ATSs have split into two distinct groups. The distinction between the groups is largely a function of the rules promulgated by the SEC under the national market system (“NMS”) created by Congress in 1975 to replace the previous fixed commission regime. Under the NMS, exchange members are required to disclose consolidated market data regarding their trades to the market. The following excerpt from the Market Structure Concept Release describes the content of the disclosure and Congress’s motive in requiring it:

 consolidated market data includes both: (1) pre-trade transparency – real-time information on the best-priced quotations at which trades may be executed in the future (“consolidated quotation data”); and (2) post-trade transparency – real-time reports of trades as they are executed (“consolidated trade data”). As a result, the public has ready access to a comprehensive, accurate, and reliable source of information for the prices and volume of any NMS stock at any time during the trading day. This information serves an essential linkage function by helping assure that the public is aware of the best displayed prices


297 Exchanges typically employ a series of algorithms to address all of the different order issues the exchange may receive. For instance, the algorithms for recognizing user names or uncrossing orders can be applied to all markets exchange wide.

298 See Commodity Futures Trading Comm'n, Tech. Advisory Comm., Best Practices for Organized Electronic Markets 5 (Apr. 24, 2002), http://www.cftc.gov/stellent/groups/public/@aboutcftc/documents/file/acinterimmarketaccessreport.pdf (defining privilege market access as “any rule, policy or processing convention of organized markets that discriminates among classes of market participants when providing any of their services, access to their services or access to market critical information”).


301 Id. at 10.
for a stock, no matter where they may arise in the national market system. It also enables investors to monitor the prices at which their orders are executed and assess whether their orders received best execution.\textsuperscript{302}

The difference in ATSs revolves around pre-trade transparency. The first group of ATSs report consolidated quotation data for every trade that occurs on the exchange. These ATSs are essentially electronic equivalents to the traditional exchanges and some have grown so big that they seek registration as a stock exchange in order to compete directly with the traditional markets, such as the NYSE, through their electronic facilities.\textsuperscript{303} The second group of ATSs, dark pools, do not report consolidated quotation data.

The rise in dark pools began with the deregulation of the securities exchanges in 1975. Prior to 1975, dark pools were not possible because maintenance of fixed commission rates came with a constraint prohibiting exchange members from trading exchange-listed securities off the exchange board.\textsuperscript{304} In 1975, however, the fixed commission regime ended and so did the ban on off-exchange trading in various situations, opening the door for off-exchange venues such as dark pools.\textsuperscript{305}

Another factor that fueled the rise of dark pools was the demutualization of exchanges.\textsuperscript{306} The first stock exchange to demutualize was the Stockholm Stock Exchange in 1993. By 1999, of 52 exchanges present at a meeting of the Federation

\begin{footnotes}
\item[302] Id.
\item[304] Id. at 156.
\item[306] "Demutualization” is a term used to describe the transition of a securities exchange from a mutual association of exchange members operating on a not-for-profit basis to a limited liability, for-profit company accountable to shareholders. Jennifer A. Elliott, Demutualization of Securities Exchanges: A Regulatory Perspective (IMF, Working Paper No. 02/119, 2002).
\end{footnotes}
Internationale des Bourses des Valeurs, 15 had demutualized, 14 had member approval to demutualize and 15 were actively contemplating demutualization.\textsuperscript{307} The NYSE did not demutualize until 2005.\textsuperscript{308} These changes in stock exchange structure and governance led to cross-border mergers that are still ongoing.\textsuperscript{309} This changed model for the secondary trading markets was a response to international competition, and also competition from off exchange trading venues.

While deregulation and demutualization opened the door for dark pools, one of the chief reasons for their rapid proliferation in the last decade is the SEC’s promulgation of Regulation NMS in 2004.\textsuperscript{310} Prior to Regulation NMS, institutional investors were able to pursue strategies that kept their orders secret and thus avoid the problem of others exploiting their trade described above.\textsuperscript{311} Regulation NMS, however, required registered national exchanges to aggregate as well as publicize all quotes and forced broker-dealers to execute trades at the best price.\textsuperscript{312} This Regulation, combined with the move to listing stocks in decimal increments, made cloaking trades on the registered exchanges virtually impossible. Institutional investors, therefore, sought a new way to hide their trades and found it in the form of Regulation ATS. Regulation ATS, enacted in 1998, allowed trading to occur without the disclosure of public quotes so long as trading volume in a particular stock on the ATS did not exceed five percent of the national trading volume in that stock.\textsuperscript{313} This loophole, combined with advances in computer technology and trade matching algorithms, allowed dark pools to take off.\textsuperscript{314}

Despite this growth, dark pools still had some difficulty finding willing counter parties for their customers’ requested transactions.\textsuperscript{315} In response, dark pools started using indications of interest (“IOI”) to attract liquidity.\textsuperscript{316} IOIs, which did not have to be disclosed under Regulation NMS, served as notice that a dark pool was attempting to

\begin{footnotesize}
\begin{enumerate}
\item IOSCO, ISSUES PAPER ON EXCHANGE DEMUTUALISATION (June 2001).
\item See Redrawing the Battle Lines, ECONOMIST, Apr. 30, 2005.
\item By 2007, it was estimated there were 40 such pools being operated. David Bogoslaw, Big Traders Dive into Dark Pools, BUS. WEEK ONLINE, Oct. 3, 2007, http://www.businessweek.com/print/investor/content/oct2007/pi2007102_394204.htm.
\item Robert Hatch, Reforming the Murky Depths of Wall Street: Putting the Spotlight on the Security and Exchange Commission’s Regulatory Proposal Concerning Dark Pools of Liquidity, 78 GEO. WASH. L. REV. 1032, 1037 (July 2010).
\item Id.
\end{enumerate}
\end{footnotesize}
Conduct a transaction involving a specific security. This innovation, combined with many large-broker dealers engaging in dark trading, established dark pools as a force to be reckoned with in the global markets.

Even before the Flash-Crash the rise of dark pools caused regulators to worry about market fragmentation, which is the “the existence of multiple, geographically separated forums in which trading in the same security occurs. . . .” Fragmentation can cause inefficiency and, under some conditions, systemic risk in the securities markets because it can disturb the price discovery mechanism of markets by scattering liquidity and order flow among various markets. One undesirable effect of fragmentation is an increase in the bid-ask spread for securities, which was exhibited during the Flash-Crash in spectacular fashion. The SEC recognized these issues prior to the Flash-Crash in its January 2010 Concept Release on market structure (“Market Structure Concept Release”), which raised issues about fragmentation, efficiency and fairness in the public equity markets in view of high frequency trading, dark pools, direct electronic access and related matters. In soliciting comments, the SEC asked “(f)or example, do the high speed and enormous message traffic of automated trading systems threaten the integrity of trading center operations?”. Before the SEC even had an opportunity to evaluate the comments it received in response to this question, the Flash-Crash provided a resounding “Yes”.

Dark pools raise a number of regulatory concerns beyond market fragmentation. The first concern is that, by hiding information from the public, they can harm the integrity of public price quotes because investors do not know if they are getting the best price for their transactions. A second concern is the dark pools could attract enough liquidity out of traditional exchange to make it harder and more expensive for

317 Id. IOIs did not always specify whether it was a sale or purchase or the identity of the investor but they did typically indicate an offering price that was better or equal to the price available on the public exchanges. Id.
318 Nearly all of Wall Street’s investment bans expanded their ability to perform trades without using public exchanges. Goldman Sachs built the largest dark pool in the country, Sigma-X, and Merrill Lynch and Citigroup also built their own dark pool operations. Id.
319 7.9% of share volume in NMS stocks in September 2009 was in dark pools. Market Structure Concept Release, Figure 6.
321 Roberta Karmel, A Retrospective on the Unfixing of Rates and Related Deregulation, in REGULATED EXCHANGES: DYNAMIC AGENTS OF ECONOMIC GROWTH 149, 156 (Larry Harris ed., 2010).
323 Id. at 31.
retail investors to trade.\textsuperscript{325} The IOSCO Technical Committee has expressed the view that pre-trade transparency is a key element of the price discovery process and that it was concerned about free-rider problems when dark orders and dark pools do not contribute to pre-trade price discovery.\textsuperscript{326} According to the Technical Committee, dark pools’ lack of pre-trade transparency leads to information fragmentation problem, and when a jurisdiction has multiple dark pools, it faces the possibility that post-trade information may not be consolidated with post-trade information from other venues.\textsuperscript{327}

The use of dark pools is most pronounced in the United States and Europe, although the same drivers of dark pool growth in the United States and in Europe (i.e. innovative execution platforms and the search for low-cost, low-impact executions) could also drive growth in other regions. Jurisdictions differ in their regulation of dark pool operators – for example, some are regulated as exchanges, some are subject to registration requirements for investment dealers, and some are regulated as an intermediary.\textsuperscript{328} Dark orders, on the other hand, are typically subject to the same regulations as displayed orders, with the major exception being that they are not subject to pre-trade transparency requirements.\textsuperscript{329} According to IOSCO, regulators agree that transparency is a core element in ensuring that markets operate in a fair, orderly, and efficient manner, but they approach transparency in different ways. In the United States and Canada, for example, to encourage transparency, transparent orders receive priority over dark orders at the same price level within a trading venue.\textsuperscript{330} As markets become increasingly fragmented and complex, IOSCO believes that regulators should ensure that pre-trade information is available to markets, while being mindful of the trading interest of professional investors who are concerned about the costs of pre-trade transparency.\textsuperscript{331} With respect to post-trade transparency, most jurisdictions require information about trades executed in dark pools to be published immediately, although the nature of the information that is disseminated to the public varies across jurisdictions.\textsuperscript{332} Also, most jurisdictions require trades executed on dark pools be reported to regulators, although the nature of the information that is reported varies.

\textsuperscript{325} Id.
\textsuperscript{326} IOSCO, PRINCIPLES FOR DARK LIQUIDITY at 19 (May 2011). The regulatory frameworks that are used to protect the integrity of the price discovery process include: ensuring transparent orders receive execution priority over dark orders; ensuring dark pools provide price improvement over the National Best Bid/Offere to small orders; ensuring limited scope for waivers to pre-trade transparency; referencing prices within the dark pools to those of the national exchange; and trade through protection Id. at 19-20. As for information received post-trade, regulatory initiatives may be needed to improve the accuracy of information available. Id. at 20.
\textsuperscript{327} Id. at 20.
\textsuperscript{328} Id. at 13.
\textsuperscript{329} Id. at 14.
\textsuperscript{330} Id. at 14.
\textsuperscript{331} Id. at 15.
\textsuperscript{332} Id. at 16-17.
Some reporting is done on a real-time basis, while other jurisdictions require reporting at the end of the day or at the end of the quarter.\textsuperscript{333}

In May 2011, IOSCO published its Final Report on Principles for Dark Liquidity.\textsuperscript{334} This report focused on transparency and price discovery; fragmentation; knowledge of trading intentions; fair access; and the ability of market players and regulators to assess actual trading volume in dark pools.\textsuperscript{335} The expanded use of dark liquidity and dark pools is an innovation that developed as a result of the increased competition among trading venues that provide liquidity for equity securities. In a 2001 report on transparency, IOSCO stated its belief that market transparency is vital to the fairness and efficiency of a market, but acknowledged that transparency may create disincentives for those that trade large blocks or put up capital to facilitate larger trades. That report urged regulators to assess the appropriate level of transparency, identified two dimensions for regulators to consider when developing a transparency regime – scope of the requirements and their application to different trading methods – and noted that the same transparency approach might not be suited to all platforms or types of trading.\textsuperscript{336}

Concerns about fairness and market integrity have also been raised. As IOSCO has always called for the fair access to markets and to trading opportunity, the Technical Committee expressed its concern that dark pools might unfairly deny certain participants access because access to dark pools are often restricted.\textsuperscript{337} To ensure fair price discovery, all similarly situated market participants should have equitable access to trading information on a reasonable and non-discriminatory basis, but dark pools compromise this principle.\textsuperscript{338} Finally, the Technical Committee expressed concerns about market participants’ lack of information about the operations of dark pools and dark orders, which may result in market participants making uninformed trading decisions and ultimately in a lack of confidence in the market.\textsuperscript{339}

In view of these regulatory problems, IOSCO drafted principles on dark pools and dark orders that are designed to: minimize the adverse impact on the price discovery process; mitigate the effect of potential fragmentation of information and liquidity; ensure regulators have access to adequate information to monitor the use of dark pools and dark orders; ensure that investors have sufficient information to understand how orders are handled and executed; and increase the monitoring of dark orders and

\textsuperscript{333} Id. at 17-18.
\textsuperscript{334} IOSCO, PRINCIPLES FOR DARK LIQUIDITY (May 2011).
\textsuperscript{335} Id. at 2.
\textsuperscript{336} Id. at 6-7.
\textsuperscript{337} Id. at 21-22.
\textsuperscript{338} Id. at 22.
\textsuperscript{339} Id.
dark pools to facilitate an appropriate regulatory response. The principles are divided into five topics: transparency to market participants and issuers; priority of transparent orders; reporting to regulators; information available to market participants; and regulation of the development of dark pools and dark orders. These principles are:

(1) The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality;

(2) Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order;

(3) In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue;

(4) Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders;

(5) Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed;

(6) Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

In addition to IOSCO, the SEC and CFTC have issued recommendations concerning dark pools in their joint report on the regulatory response to the Flash-Crash. In regards

340 Id. at 24.
341 Id. at 25-29.
to dark pools, the rising proportion of equity transactions that trade without any public display of liquidity prompted the SEC-CFTC Committee to encourage the SEC and CFTC to consider incentives to supply liquidity, especially in turbulent markets. Similarly, the committee recommended the development of incentives or regulation for persons who implement market maker strategies to maintain best buy and sell quotations that are reasonably related to the market, although this recommendation stopped short of recommending market maker obligations. The committee also focused on internalization, pointing out that one-third of share volume is executed on dark trading venues. Therefore, the SEC should conduct further analysis as to the impact of a broker-dealer maintaining privileged execution access as a result of internalizing customer orders and imposing obligations on such broker-dealers with respect to these order executions. Also, the committee recommended the SEC study the costs and benefits of alternative routing requirements to Regulation NMS rules. Both the SEC and CFTC were urged to consider reporting requirements for measures of liquidity and market imbalance for large market venues. Finally, the Committee recommended that the SEC proceed with some urgency to implement a consolidated audit trail for the US equity markets and the CFTC also enhance its data collection.

4. Recent Developments and Outlook Moving Forward

Debates about market structure are likely to continue in the wake of the Flash-Crash and public criticism of HFT on a U.S. domestic and international level. IOSCO is fostering further debate through its Consultation Report on Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency published in July 2011. This report was in response to a direction for reform from the G-20 to develop and report to the FSB “recommendations to promote markets’ integrity and efficiency and to mitigate the risks posed to the financial system by the latest technological developments.” The purpose of the report is to build on the papers previously issues by IOSCO covering market structure discussed above and to specifically to seek comments on HFT.

For purposes of its report, the Technical Committee put forth two important definitions. It defined “market integrity” as “the extent to which a market operates in a...

343 Id. at 11.
344 Id. at 12.
345 Id. at 13.
346 Id. at 14.
347 Id. at 14.
348 Technical Committee of IOSCO, Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency, Consultation Report, July 2011 CR02/11.
349 Id. at 6.
manner that is, and is perceived to be, fair and orderly and where effective rules are in place and enforced by regulators so that confidence and participation in the market is fostered. “Market efficiency” is defined as “the ability of market participants to transact business easily and at a price that reflects all available market information. Factors considered when determining if a market is efficient include liquidity, price discovery and transparency.” Further, the report asserts that financial markets should fulfill their role of “financing the real economy, by channeling investments and savings, facilitating capital formation and efficiently allocating and transferring risk.”

The Technical Committee then focuses on the most important technological changes in the trading markets: algorithmic trading, market fragmentation and dark liquidity, DEA, co-location, tick sizes and fee structures. It notes that high frequency traders provide liquidity to the markets, but discourage some market participants from using the market and also contribute to the transmission of socks across trading venues. As a result, fundamental investors may withdraw from the market.

Due to the level of concern emanating from the Flash-Crash, policy makers have put HFT at the top of the policy agenda. Although HFT (and all of the related problems arising from the technological changes discussed) are primarily the focus of market regulators in the United States and Europe, regulators in India, Australia and Canada have also focused on these matters. The Technical Committee acknowledges that HFT cannot be defined as any one strategy, but finds that most of the strategies are based on profiting from very small price changes and rapid capital turnover. The Technical Committee states that HFT falls into three broad categories: market making, arbitrage and directional. As for the effects of HFT, the Technical Committee asserts that the empirical evidence on the impact of HFT is scarce but the available evidence fails to uncover a consistent and significant negative effect on liquidity. Yet, the quality of that liquidity is of concern. Further, HFT may have had an adverse impact on confidence in the fairness and integrity of markets. It also appears that HFT may result in extreme price shocks that are easily transmitted.

The Technical Committee noted some regulatory initiatives taken by the SEC, (proposals for a consolidated audit trail and larger trader reporting), the European

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350 id. at 8.
351 id.
352 id. at 9.
353 id. at 10.
354 id. at 12.
355 id. at 19.
356 id. at 20. HFT in the U.S. accounts for 56% of the trading; in Europe for 38% and in Asia 10-30%. id. at 22.
357 id. at 23.
358 id. at 24-27.
359 id. at 29.
Commission (review of MiFID with regard to HFT and other matters) and the ASIC in Australia (proposals on DEA, risk controls for automated trading, volatility controls and pre-trade transparency).\(^{360}\) It also noted its own prior reports relating to market structure and the principles set forth, many of which have been discussed above in this article.\(^{361}\) Some possible future actions for the regulation of trading firms, market operators and market structure were also set forth.\(^{362}\) The Technical Committee then posed fourteen questions of its members regarding the extent of the risks to market integrity and efficiency from HFT and other technological developments in the trading markets and how to prioritize steps to mitigate those risks.\(^{363}\) The comments from industry members to the questions posed by the Joint SEC-CFTC Advisory Committee in their report were in large part negative. Whether IOSCO members will respond differently to the questions posed by the Technical Committee remains to be seen.

More recently there have been several signs that regulators are making moves to address the issues surrounding HFT and dark pools. In regards to HFT, one idea that has gained traction in a number of countries is the imposition of a financial transaction tax. France has moved quickest on this idea, with its Senate approving a bill on November 22, 2011 that applies a transaction tax to market participants “in cases where daily cancellation rates for orders for buying and selling financial instruments on public markets exceed 50%.”\(^{364}\) If the French National Assembly approves the bill the tax will go into effect on January 1, 2012.\(^{365}\) The European Union, has brought forth a proposal to tax trades in stock and bonds at .1% and trades in derivatives at .01%.\(^{366}\) A similar proposal has been made in the U.S. Congress, with Senator Tom Harkin and Representative Peter DeFazio co-sponsoring a bill that would tax all financial transactions at .03%.\(^{367}\) A financial transaction tax of the type that have been proposed would make HFT impossible because the very small profits that are made on each trade would be wiped out after the trade tax was assessed.\(^{368}\) Fearing the loss of profits generated by HFT, certain members of the securities industry have voiced strong opposition to any such tax. In particular, Bill Brody, chief executive of the Chicago

\(^{360}\) Id. at 33.

\(^{361}\) See id. at 31-37 and Annexes 1-4.

\(^{362}\) Id. at 38-40.

\(^{363}\) Id. at 41-42.


\(^{365}\) Id.


\(^{368}\) Id.
Board Options Exchange, has lauded HFT for bringing cheaper and more efficient financial trading to all market participants.\textsuperscript{369} According to Brodsky, “(t)o say (HFT) causes volatility is completely erroneous...(t)he flash crash was an aberration. The regulators forced changes on the markets and didn’t understand all the consequences. The only effect HFT has had has been to make markets fast, cheap and liquid.”\textsuperscript{370}

Another idea is to install “limit up, limit down” trading mechanisms. On May 25, 2011, NYSE Euronext, on behalf of a large number of U.S. stock exchanges, submitted a plan to the SEC entitled National Market System Plan to Address Extraordinary Market Volatility.\textsuperscript{371} The plan sets forth proposed procedures that specify market-wide limit up-limit down requirements designed to prevent trades in individual national market system stocks from occurring outside specified price bands.\textsuperscript{372} These procedures would be coupled with trading pauses to accommodate more fundamental price moves, as opposed to erroneous trades or gaps in liquidity that are momentary.\textsuperscript{373}

While there has been significant attention paid to HFT, regulators have done little to address the issues surrounding dark pools. One notable exception to this is the SEC’s first enforcement action concerning a dark pool, brought against Pipeline Trading Systems LLC.\textsuperscript{374} The action, which was settled by the company for $1.2 million, alleged “that the firm was running a secret affiliate that sought to trade ahead of customers’ orders before filling "a vast majority" of them on the private market.”\textsuperscript{375}

Another reform, proposed by the SEC, is the development of a consolidated audit trail.\textsuperscript{376} This proposal is aimed at addressing the issues surrounding both HFT and dark pools by providing the SEC a real-time data feed of detailed market activity.\textsuperscript{377} Currently, the SEC is forced to rely on data from Finra, exchanges as well as firms such as mutual funds and bank-trading desks to track the market.\textsuperscript{378} The current system leaves the SEC practically flying blind because it is unable to track a large amount of trading every day.\textsuperscript{379} Additionally, as was the case with the Flash-Crash report, the lack

\begin{footnotes}
\item[370] \textit{Id.} (quoting Bill Brodsky)
\item[372] \textit{Id.}
\item[373] \textit{Id.}
\item[375] \textit{Id.}
\item[377] \textit{Id.}
\item[379] \textit{Id.}
\end{footnotes}
of a central repository for data can lead to significant delays in diagnosing what went wrong after an irregular market event. With a consolidated audit trail, the SEC would be able to directly monitor the market, reducing the negative effects of the current information asymmetry.

The Flash-Crash exposed serious dysfunction and risk in the trading markets, but it seems that the regulators thus far do not have the knowledge or backbone to take serious actions to mitigate these problems, especially in the face of industry opposition. Further, the securities industry has conflicts of interest with regard to these matters. Will IOSCO, as an international body, be able to generate reforms that the SEC, CFTC and other national regulators are unwilling or unprepared to undertake? The answer to this question may depend in part upon what further pressure the G-20 brings to bear on IOSCO.

IV. IOSCO’S ROLE IN INTERNATIONAL HARMONIZATION

Although a proliferation of agencies are involved in international harmonization of financial regulation, and they have all been active in promulgating new standards in the wake of the 2008 financial crisis, IOSCO is the only organization specifically devoted to securities regulation. Also, it is the only organization that includes all or virtually all of the world’s securities commissions. IOSCO is devoted to establishing harmonized international standards for the regulation of securities issuances and trading, but because it includes both developed and emerging marketplaces in its constituency, it is able to formulate only very general standards for all of its members. Although the Technical Committee is comprised of the mature capital market regulators, IOSCO is also hampered in developing rigorous international standards for those markets by the size and variety of the members of the Technical Committee, the different corporate finance structures in the countries of the Technical Committee, and rivalries among these countries and their regulators for primacy in the capital markets. The danger of a race to the bottom is always a threat to the effort by some jurisdictions, especially the Continental countries of the EU, and the United States, to establish stricter regulatory standards. Further, many of the serious threats to market stability, such as fragmented markets and HFT, have emerged first in the United States, and then spread only later, if at all, to other marketplaces, so only a few of IOSCO members are even interested in developing harmonized standards to deal with these threats. Further, the political situation in the United States since the 2008 meltdown, and in Europe since the sovereign debt crisis, make it very difficult for securities regulators to agree upon new measures to counter systemic threats.

Governments generally, and regulators particularly, are frequently fighting the last war. This paper has outlined some of IOSCO’s initiatives in that regard, such as the regulation of hedge funds, CRAs and short selling. Even with regard to these matters, there is a general agreement that hedge funds and CRAs should be subject to
registration with securities authorities and better regulation, but there has not been agreement about what that better regulation should be. The IOSCO principles on short selling did not recommend short selling bans, but rather prohibitions on naked short selling and disclosure. Nevertheless, in the summer of 2011, several European countries imposed bans on the short selling of bank stocks. These bans probably were ineffective in curtailing the decline of the price of bank stocks except very temporarily. National politics in this case trumped harmonization.

In the case of new and ongoing systemic threats, IOSCO seems unlikely to put a damper on DEA, dark pools and HFT. Since the most advanced examples of these trading strategies are taking place in the United States, if the SEC or other U.S. regulatory agencies are unable to curb these threats to the public trading markets, it is unlikely that IOSCO will be able to do so. Where many regulators, particularly securities commissions represented in the Technical Committee agree upon standards, then harmonization by IOSCO is possible. Even then, however, since any new standards must be implemented on a country by country basis, and primarily in countries with notice and comment procedures, standards that are strongly opposed by the securities industry may well not be implemented. In the United States, even where a controversial standard is put into place by a regulatory agency, a court challenge is always possible. Further, since IOSCO only establishes standards and does not enforce these standards, implementation of agreed upon standards may vary.

IOSCO has long been amenable to leadership by the SEC. But the SEC is currently under political attack by the left and the right. Although the agency survived under Dodd-Frank and even greatly increased its authority, especially with respect to some of the matters discussed in this article such as hedge fund and CRA regulation, its power has been eclipsed to some extent by the FSOC and the banking agencies. Just as the SEC must now pay attention to the Federal Reserve Board, IOSCO is to some extent subservient to the G-20. Although IOSCO has responded to the financial crisis by expanding its horizons and focusing on financial stability, it is not as important a player in the league of international financial regulators as others.

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