July 2010
IMF Country Report No. 10/250

United States: Publication of Financial Sector Assessment Program Documentation—Reports on Observance and Codes

This paper was prepared based on the information available at the time it was completed on July 12, 2010. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the United States or the Executive Board of the IMF.

The policy of publication of staff reports and other documents by the IMF allows for the deletion of market-sensitive information.

Copies of this report are available to the public from

International Monetary Fund ● Publication Services
700 19th Street, N.W. ● Washington, D.C. 20431
Telephone: (202) 623-7430 ● Telefax: (202) 623-7201
E-mail: publications@imf.org ● Internet: http://www.imf.org

International Monetary Fund
Washington, D.C.

FINANCIAL SECTOR ASSESSMENT PROGRAM

UNITED STATES OF AMERICA

BASEL CORE PRINCIPLES FOR EFFECTIVE BANKING SUPERVISION (BCP)

REPORT ON STANDARDS AND CODES (ROSC)

JULY 2010

INTERNATIONAL MONETARY FUND
MONETARY AND CAPITAL MARKETS DEPARTMENT

Contents Page

GLOSSARY

BCBS	Basel Committee on Banking Supervision
BCP	Basel Core Principles for Effective Banking Supervision
CAMELS	Capital adequacy, Asset quality, Management, Earnings, Liquidity, and Sensitivity to Market Risk
CHIPS	Clearing House Interbank Payments System
CP	Core Principle
CRE	Commercial Real Estate
DAR	Detailed Assessment Report
FASB	Financial Accounting Standards Board
FATF	Financial Action Task Force
FBA	Federal Banking Agencies
FDIC	Federal Deposit Insurance Corporation
FDI Act	Federal Deposit Insurance Act
FEDWIRE	The Federal Reserve Banks' Fedwire Funds Services
FFIEC	Federal Financial Institutions Examination Council
FSSA	Financial System Stability Assessment
GSE	Government-Sponsored Enterprises
MTM	Mark to Market
OCC	Office of the Comptroller of Currency
OFAC	Office of Foreign Assets Control
OTC	Over-the-Counter
OTS	Office of the Thrift Supervision
PCA	Prompt Corrective Action
ROSC	Report on Standards and Codes
RTGS	Real Time Gross Settlement System
SCAP	Supervisory Capital Assessment Program
SLHCs	Savings and Loan Holding Companies
U.S. GAAP	U.S. Generally Accepted Accounting Principles

I. Summary, Introduction, and Methodology

1. **This ROSC summarizes the Detailed Assessment Report (DAR) on current state of the U.S. implementation of the Basel Core Principles for Effective Banking Supervision that was published in May 2010.**[1] The DAR was completed during October/November 2009 as part of a Financial Sector Assessment Program undertaken by the International Monetary Fund[2] during October–November 2009, and reflects the regulatory and supervisory framework in place as of the date of the completion of the assessment. This assessment was undertaken in the immediate aftermath of a period of extreme market stress and continued general economic downturn**.** The causes of the financial crisis were many and cannot be identified simply through the lens of the BCPs, but they do identify shortcomings that were material in the run-up to the crisis. Importantly, this assessment is not intended to assess the merits of the wide-ranging program of reforms currently being proposed and adopted within the United States.

2. **The assessment identifies key weaknesses in the regulatory and supervisory framework that need to be dealt with effectively.** The causes of the financial crisis were many and cannot be identified simply through the lens of the BCPs, but they do identify shortcomings that were material in the run-up to the crisis, many of which were not unique to the United States. In this assessment, three key weaknesses have been identified: (i) a complicated regulatory structure that necessitates a heavy burden of cooperation and coordination between agencies; (ii) legislative provisions that have hindered and discouraged strong consolidated supervision; and (iii) certain material weaknesses in the oversight of banks' risk monitoring and risk management practices.

3. **The assessment team**[3] **held extensive discussions with staff from the main supervisory agencies and industry representatives.** The team had the benefit of working with a comprehensive self-assessment completed by the U.S. agencies, enjoyed excellent cooperation with its counterparts, and received the information it required.

4. **The approach taken by the assessors in assessing BCP compliance has been to examine whether the four Federal banking agencies (FBAs)—the Federal Reserve, the OCC, the OTS, and the FDIC—by themselves provide sufficiently effective supervision**

---

[1] The underlying Detailed Assessment Report was published in May 2010 and is available at http://www.imf.org/external/pubs/cat/longres.cfm?sk=23863.0.

[2] For further discussion see the accompanying Financial System Stability Assessment (FSSA), (www.imf.org).

[3] The BCP assessment was conducted by Wayne Byres (Executive General Manager, Australian Prudential Regulation Authority), Nicholas Le Pan (IMF Consultant; ex-Head of the Office of the Superintendent of Financial Institutions, Canada and ex-Vice Chairman of the Basel Committee for Banking Supervision), and Goran Lind (Adviser to the Swedish Riksbank and longtime member of the Basel Committee).

to meet the requirements of the BCPs. Since almost all banks[4] in the U.S. have a primary FBA to oversee them, the assessors did not seek, nor have the capacity, to test the strength and capability of each and every state banking supervisor. Where the assessors have concluded there may be gaps or shortcomings in the operations of the FBAs relative to the BCPs, the assessors have considered whether the work of the state banking agencies would be sufficient to compensate.

II. Institutional and Market Structure—Overview

5. **The U.S. financial system is large and highly diversified. At end-2007, total U.S. financial assets amounted to almost four and a half times the size of GDP.** Of this, however, less than a quarter of total financial assets were accounted for by traditional depository institutions. The crisis has radically changed the shape of the U.S. financial system in a short timeframe. The top investment banks recently have been reconfigured as bank holding companies, nonbanks severely weakened, the housing GSEs are now in government conservatorship, and private securitization remains dormant.

III. Preconditions for Effective Banking Supervision

6. **Overall, the public infrastructure supporting effective banking supervision in the U.S. is well-developed.** Business laws in the United States, including contract, bankruptcy, and property law, are well-developed and reliable. Contract law is established by the combination of common law and state statute. Property rights are protected under the Bill of Rights of the United States Constitution and under state laws. Business law disputes are typically resolved in state trial courts of general jurisdiction. The U.S. possesses an independent judiciary and well-regulated accounting, auditing, and legal professions. U.S. Accounting Principles (U.S. GAAP) are established by the Financial Accounting Standards Board (FASB) and have been widely accepted internationally for many decades. Financial statement audit requirements are robust, having been considerably strengthened in 2002 with the passage of the *Public Company Accounting Reform and Investor Protection Act* (also known as the Sarbanes-Oxley Act).

7. **There is a considerable infrastructure in the U.S. that promotes and supports market discipline.** This includes a well-developed system of continuous disclosure obligations by public companies, extensive disclosure obligations for certain other investments, active rating agencies and an analyst community which disseminates its views through multiple media. As a result, major banks disclose considerable quantitative and qualitative information quarterly and annually. FBAs regularly publish bank performance reports, which show in detail how individual institutions compare with their peers. Formal enforcement actions brought by the FBAs are routinely made public.

---

[4] "Banks" includes Federal Reserve members—all FDIC-insured national banks (supervised by the OCC) and FDIC-insured state-chartered banks (supervised by the Federal Reserve)—and nonmembers (supervised by the FDIC); and FDIC-insured savings associations (supervised by the OTS) unless the context indicates otherwise.

8. **The wholesale payment infrastructure in the United States comprises two systems, which are of systemic importance and settle in central bank money.** The Federal Reserve Banks' Fedwire Funds Services (Fedwire) is a real time gross settlement system (RTGS) operated by the central bank, and the Clearing House Interbank Payments System (CHIPS) is a private sector system combining net and gross real time settlement. The retail payment infrastructure employs a number of public and private sector Automated Clearing Houses, regional and interregional check exchanges and card payment schemes.

9. **U.S. banking laws provide the FBAs with a broad range of remedial powers.** These range from requiring an institution to adopt a resolution of its board of directors formally committing the bank to implement specified corrective actions through issuance by the supervisor of a formal cease and desist order that is enforceable through injunctions entered by a Federal Court. A deposit insurance scheme, sponsored by the FDIC, insures all deposits at insured banks up to US$250,000 per depositor.[5] The Deposit Insurance Fund may be used, on a least-cost basis, either to compensate depositors or to facilitate the resolution of the failed bank, typically through a purchase-and-assumption transaction.

10. The **Federal Reserve Bank's emergency lending assistance capability includes authority to provide liquidity assistance to** (i) solvent but illiquid banks, (ii) undercapitalized banks certified by their primary supervisor to be viable, and (iii) any individual, partnership, or corporation "in unusual and exigent circumstances" when the borrower is unable to obtain financing from banks. The Fed has used this authority in the current financial crisis to provide support to financial institutions and even to non-financial entities through its support of the commercial paper market and through other means.

11. **The FDI Act provides a comprehensive scheme for the resolution of an insolvent bank.** All state and federally chartered banks that conduct retail deposit taking operations in the United States have their deposits insured by the FDIC. The FDI Act provides a comprehensive definition of insolvency that includes a balance sheet test, a liquidity test, and various tests of viability. This authority, and the "prompt corrective action" provisions, authorizes a bank to be placed in receivership or be otherwise resolved before its capital has been exhausted. As Receiver, the FDIC has available to it a broad array of tools to facilitate the process of resolving the insolvent bank.

IV. MAIN FINDINGS

Objectives, independence, powers, transparency, and cooperation (CP 1)

12. **The multiplicity of agencies, which can potentially impede effective supervision, is a striking feature of the U.S. supervisory system.** A system with multiple supervisory/regulatory agencies (particularly if mandates are unclear or very broad in scope) can lead to overlap that dilutes accountability, unproductive rivalry, lessened focus on important safety and soundness matters, material coordination costs in setting regulatory

[5] The amount of insurance was temporarily increased from US$100,000 to US$250,000 until year-end 2013.

policy and supervision, and undue compliance costs for banks. While the assessors have not taken a view on the desirable number of regulators or the optimal regulatory structure for the United States, it is clear that the system carries a heavy burden of ensuring cooperation and coordination between the agencies to avoid overlap and gaps. Another striking feature of the U.S. system is the general absence of detailed, clearly stated objectives and mandates for each agency in the agency's original governing statutes, which are common features of laws in some other countries.

13. **The FBAs have a strong tradition of authority and accountability for supervisory matters being vested in those in charge of the supervision of individual banks and holding companies.** This system has considerable strengths, but the crisis has revealed the need for agencies to better integrate institution-specific information and judgments about emerging risks with experience from broader (system-wide) perspectives. Improvement plans need to be inter-agency not just within each agency, which will require strong governance.

Licensing and structure (CPs 2–5)

14. **Banks have an unusual degree of choice over their regulator. This is largely due to the existence of a dual banking structure—involving state and Federal charters—and multiple federal regulators.** While the actual number of conversions in each year is small, but there remains an "implicit threat" of conversion from banks to their supervisors. The stated minimum capital of US$2 million for new banks is also relatively low, compared to many other countries; however, in practice much higher capital levels can be required for de-novo banks.

Prudential regulation and requirements (CPs 6–18)

15. **The U.S. system is still on the Basel I risk-based capital framework, though the advanced approaches of Basel II have been enacted and will apply to the major banks over the next 2–3 years.** Some additional features have been incorporated in the U.S. Basel I framework, e.g., an approach to securitization that is not present in Basel I. In addition, the U.S. capital regulations include minimum leverage ratio requirements. The BCPs require supervisors to set prudent and appropriate minimum capital adequacy requirements for banks. This is generally true in the United States and the U.S. system contains features such as the leverage requirements and Prompt Corrective Action requirements that lead banks to hold capital well above the minimum. However, some important shortcomings relative to CP 6 exist in the definition of Tier 1 capital for holding companies with regard to innovative instruments, in the absence of capital rules for SLHCs, and in allowing intangibles to count for a very high portion of a bank or thrift's Tier 1 capital.

16. **Severe shortcomings in bank risk management have been revealed in the recent crisis and supervisory oversight was not effective in identifying those weaknesses and having them remedied.** These shortcomings have been sufficiently large to create serious problems for both individual banks and for the financial system. As has been noted in reports issued by global senior supervisors, many of these were not unique to the United States. These weaknesses resulted partly from the confluence of credit (including counterparty

credit), market, and liquidity risk under extreme conditions. There is broad, shared understanding of the improvements needed and the strategy to achieve them, and the processes to monitor progress are already in place.

17. **The FBAs have well-developed policies and processes to regulate and supervise traditional credit risk.** However, there is clear evidence that in the recent turmoil and the events leading up to it, these processes were not fully effective for certain markets and products. The crisis has also revealed material weaknesses in **market risk** monitoring and management by financial institutions. The major issues are in the areas of suitability of certain market risk measurement and monitoring processes and models at certain major firms, lack of reliable and prudent valuation of mark-to-market (MTM) positions, and completeness and use of market stress testing. FBA guidance on **liquidity risk management** and supervision is consistent with existing international standards and is likely to evolve in the near term due to pending interagency liquidity guidance and Basel liquidity standards. Supervision of **operational risk** appears to be effective overall, although some greater focus and specialization might be beneficial, perhaps learning from Basel II experience. Supervision of **interest rate risk**—an issue which is of increasing importance in the current environment—is broadly consistent across the FBAs in most material respects.

18. **Banks maintain comprehensive programs, policies and procedures to reduce the risk of endangering the safety and soundness of the bank through abuse of its operations and services, including physical safety.** However, the FATF assessment conducted in 2006 identified a number of deficiencies relevant to banks that need to be remedied.

Methods of ongoing banking supervision (CPs 19–21)

19. The FBAs collectively have broad, but not unlimited, legal authority to regulate and supervise banks and holding companies subject to their jurisdiction. The FBAs use their authority to conduct on-site reviews and off-site analyses to develop a thorough understanding of the risk profile of banks and holding companies. The primary tool of supervision is the on-site examination, and the FBAs conduct full-scope on-site examinations of banks at least once every year or 18 months. There is a substantial continuous supervision program at major banks. All of these mechanisms are constrained to some extent when the individual agency is not the supervisor of the entire group, or part of the group is subject to the primary oversight of another functional regulator.

20. **Individually, each of the FBAs employs standard supervisory techniques in a broadly consistent manner.** Each agency supplies its supervisory staff with extensive manuals, guidance, and other assessment mechanisms which supervisors can use to develop their assessments and judgments. These appear well embedded in each agency's practices. There are, however, areas where the agencies could improve consistency between their operating processes, and seek to develop a "best of breed" model for supervision. The CAMELS-based rating system used by U.S. supervisors is somewhat outdated compared to those now used by overseas peers.

Accounting and disclosure (CP 22)

21. **The U.S. agencies provide for extensive disclosure of financial information by regulated banks and holding companies.** This disclosure is founded on U.S. GAAP. In discussions with supervisory staff, the decision to align regulatory reporting with U.S. GAAP, particularly with respect to the allowance for loan losses, was repeatedly criticized as it does not permit consideration of future events when estimating loan losses. The current framework also undermines the efficacy of the PCA regime (see below), as the thresholds for regulatory intervention are aligned to U.S. GAAP reporting.

Corrective and remedial powers of supervisors (CP 23)

22. **The FBAs have a range of supervisory options when a bank or holding company is not complying with laws, regulations or supervisory decisions, or is engaging in unsafe and unsound practices.** The agencies may take prompt remedial action and impose penalties. Remedial penalties and sanctions may be applied to banks and holding companies and, when appropriate, to management, board members, employees, controlling shareholders, other persons who participate in a bank's or holding company's affairs, and independent contractors, such as attorneys, appraisers, and accountants.

23. **A PCA regime applies to those instances in which a bank's capital falls below the prescribed minimum ratios/levels.** The regime provides a backstop against regulatory forbearance. The agencies also have powers to intervene even before the minimum capital ratio is breached. As an indicator of timely actions by the authorities, the rapid resolution of some major banks (and non-banks) during the present crisis can be noted. However, in many cases, while adhering to regulations and supervisory guidelines, supervisors will assess banks as being capital deficient and will require an infusion of capital, while at the same time the bank could be defined as "well capitalized" under the definitions of the PCA. This dichotomy arising from the relative inconsistency between the U.S. GAAP-based PCA regime and supervisory risk assessment systems could weaken the credibility of enforcement actions.

Consolidated and cross-border banking supervision (CPs 24–25)

24. **The existing legislation for consolidated supervision needs to be strengthened.** Restrictions, both statutory and practical, on access to information on various parts of a group make it difficult to assess risks from a group-wide perspective. Some steps have been taken to overcome this drawback as a result of the crisis; specifically FBAs have ramped up their consolidated supervision efforts including for the former investment banks that are now BHCs. However, clear, ready, and direct access, legally supported, for whichever agency is responsible for consolidated supervision is desirable. The ability in the existing legislation for supervisors to get around these restrictions when there is "a material risk to the bank" is not workable. The legislative restrictions need to be repealed.

25. **The FBAs have clear authority to share confidential supervisory information with foreign banking and other sector supervisors.** This facilitates global consolidated supervision and implementation of the underlying home-host relationship framework, but it is subject to the limitation of not impinging on "U.S. interests". The information must be

used for lawful supervisory purposes, and the recipients must keep the information confidential. FBAs provide adequate data and information to host country supervisors about U.S. banks and holding companies, to enable the host country to supervise the overseas operations of the U.S. banks. The FBAs have ongoing contact with supervisors in other countries in which U.S. banks or holding companies have material operations, including periodic visits to discuss supervisory issues.

Table 1. Summary of Compliance with the Basel Core Principles—ROSC

Core Principle	Assessment
1. Objectives, independence, powers, transparency, and cooperation	
1.1 Responsibilities and objectives	The authorities comply with this subcomponent of CP 1. Agency mandates are derived from, but are not always expressly stated in, legislation as in some other countries. Greater clarity is needed on the expectations of the bank supervisor and the holding company supervisor where these are different agencies to ensure strong coordination and clear accountability for the supervision of banking groups. Further clarity in mandates and expectations would be desirable as FBAs are expected in future to enhance their contribution to financial stability more broadly.
1.2 Independence, accountability and transparency	The authorities comply with this subcomponent of CP 1. Opportunities exist to better link strategic resource planning to more-forward-looking measures of risk and future resource demands. Improved collaboration will be needed for FBAs to make improvements such as better linking on-site, surveillance and macro staff, within and across agencies. Federal Reserve District Bank governance may not fully protect from the potential of influence from industry (or the perception thereof); it should be clearly noted that, there was no evidence of this in practice.
1.3 Legal framework	The authorities comply with this subcomponent of CP 1.
1.4 Legal powers	The authorities comply with this subcomponent of CP 1.
1.5 Legal protection	The authorities comply with this subcomponent of CP 1.
1.6 Cooperation	The authorities comply with this subcomponent of CP 1. There are channels for cooperation, coordination, and leveraging off best practices—within and between FBAs and functional supervisors that could be further enhanced as assessors saw many examples of opportunities for better inter-agency coordination.
2. Permissible activities	The authorities comply with this CP.

Core Principle	Assessment
3. Licensing criteria	The authorities comply with this CP. The scope of the interagency agreement to prevent inappropriate charter conversions should be strengthened. The (absolute) minimum capital requirement for new banks is relatively low, although practice has required higher levels of capital.
4. Transfer of significant ownership	The authorities comply with this CP.
5. Major acquisitions	The authorities comply with this CP.
6. Capital adequacy	CP 6 requires supervisors to set prudent and appropriate minimum capital adequacy requirements for banks. This is generally true and features such as Prompt Corrective Action and leverage requirements lead banks to hold capital well above the minimums. However, important shortcomings exist in the definition of Tier 1 capital for holding companies with regard to innovative instruments, in the absence of capital rules for SLHCs, and in allowing intangibles (especially mortgage servicing rights) to count for a very high portion of a bank or thrift's Tier 1 capital.
7. Risk management process	Despite the existence of formal rules, severe shortcomings in enterprise-wide risk monitoring and management at banks, were revealed in the recent crisis. Supervisory oversight was not effective in identifying those weaknesses and having them remediated. They created serious problems for banks and for the financial system. Although many of these weaknesses were present in other firms in other jurisdictions, because the U.S. system will likely remain at the forefront of financial innovation, it is imperative that risk monitoring and management systems be compliant with the requirements of this principle, which are high for the U.S., considering (as the CP mandates) the size and complexity of the financial sector. Although weaknesses have been partially remedied the robustness of needed improvements—in both banks and supervisors—will take some time to implement and test.

Core Principle	Assessment
8. Credit risk	There are well-developed rules and guidance, but processes have not been fully effective for some markets, particularly residential mortgages and CRE exposures at smaller and mid-size banks. Weaknesses in understanding risks of complex credit products were not adequately remediated by the supervisory process. Additional monitoring, supervisory focus and credit risk measurement tools being developed by certain FBAs are all desirable enhancements, but need to be placed in a more comprehensive, coordinated strategy designed to deal with identified weaknesses (including timliness of guidance, intervention and will to act) and position the U.S. to better deal with future credit cycle issues well in advance of them becoming serious problems.
9. Problem assets, provisions, and reserves	The authorities comply with this CP. The FBAs process is well developed and effective. Its effectiveness would be increased if accounting rules were changed to allow more-forward-looking provisioning.
10. Large exposure limits	The authorities comply with this CP. although the aggregate regulatory limits for total large exposures (loans plus other exposures) are high, in comparison with international practices. Reporting requirements on large exposures lack some detail (e.g., not showing total indebtedness) .
11. Exposure to related parties	The authorities comply with this CP. However, there is inadequate specificity in the supervisory regulations on board oversight and involvement, and the reporting requirements to boards and to the supervisors lack in scope and detail. These weaknesses are compensated for to a high degree by supervisory policies and reviews, which expect active board oversight and monitoring of related lending, and require remedial action in case deficiencies are observed. The limit for aggregate lending to a single related party or to a conntected group of related parties is set at 15 percent of the bank's own fund plus surplus funds (i.e., excess provisions for loan losses) which is in accordance with international best practices. The overall limit for lending to all related parties in aggregate is set at 100 percent of own funds plus surplus funds, which is higher than international practice, although the supervisory policy includes the possibility to comment on exposures even within the limit, if deemed unsafe or unsound

Core Principle	Assessment
12. Country and transfer risks	The authorities comply with this CP.
13. Market risks	Material weaknesses have been revealed at banks in market risk monitoring, use of models, valuation and risk management. Substantial improvements are in progress, but will take time to put in place and assess, because they entail complex IT and risk architecture changes as well as changes in governance, oversight and compensation incentives.
14. Liquidity risk	Guidance on liquidity risk management and supervision is consistent with existing international standards (although likely will evolve in the near term in accord with international efforts). Needed improvements to effectiveness are in progress at banks and supervisors, but cannot be fully assessed currently. Crisis-induced focus on liquidity at banks and supervisors is being formalized into an enhanced, regular, in-depth supervisory program.
15. Operational risk	The authorities comply with this CP. The agencies should continue to build more holistic and structured approaches to operational risk assessment, utilizing enhanced cross-agency mechanisms.
16. Interest rate risk in the banking book	The authorities comply with this CP. Supervisors could consider introducing a consistent measurement approach to improve risk assessment across FBAs.
17. Internal control and audit	The authorities comply with this CP.
18. Abuse of financial services	The authorities comply with this CP. It is noted that a number of CP 18-relevant issues as identified by the FATF remain to be addressed.
19. Supervisory approach	Authorities need to improve their approach to the group-wide oversight of financial groups, including unregulated entities. Introducing domestic “supervisory colleges” involving all material U.S. regulators for a group may assist, although broader reform is necessary. A review of risk rating systems, with a view to improving their capacity to distinguish between banks, is needed.
20. Supervisory techniques	The authorities comply with this CP. It is suggested that the authorities could review, perhaps under the auspices of the FFIEC, existing supervisory manuals and processes to remove unnecessary differences and develop a “best of breed” approach.

Core Principle	Assessment
21. Supervisory reporting	The authorities comply with this CP. It is suggested that the authorities review solo reporting requirements and consider the implications of U.S. GAAP for the effectiveness of supervision and the PCA regime.
22. Accounting and disclosure	The authorities comply with this CP, but could consider the introduction of statutory reporting ("whistleblower") obligations for external auditors reporting to bank supervisors, along with associated protections.
23. Corrective and remedial powers of supervisors	The authorities comply with this CP.
24. Consolidated supervision	Present legislation and practices hinder effective conduct of consolidated supervision of financial groups although supervisors work around this by changing their interpretation of the GLB Act. There are gaps in regulatory limits and reporting of large exposures, related lending, and capital on a consolidated basis at the holding company level. De facto practices of applying and monitoring large exposure and related lending limits should be expressly mandated. Lacking a fixed rule, SLHC capital is supervised on a case-by-case basis.
25. Home-host relationships	The authorities comply with this CP.

Table 2. Recommended Action Plan to Improve Compliance with the Basel Core Principles

Reference Principle	Recommended Action
1. Objectives, independence, powers, transparency, and cooperation	
1.1 Responsibilities and objectives	Consider formally setting out the mandate and objectives of the FBAs in legislation. Ensure core safety and soundness mandates and individual accountability for each FBA are clear. Clarify expectations and accountability for the primary federal bank regulator and the holding company regulator as they are inextricably linked in the case of large complex banking groups. Strengthen inter-agency coordination of supervisory processes, pursue opportunities for: more integrated supervision planning; more commonality of forward-looking risk rating systems, more sharing of off-site surveillance methodology and results, and more joint reviews.
1.2 Independence, accountability and transparency	Develop a more forward-looking detailed resource plan that takes account of risk assessments, lessons learned, and new and existing priorities. Focus senior governance within and between agencies on improvements in supervisory process. Improve public performance reporting. Alter the governance rules at Reserve Banks to remove appearance of industry influence. Raise threshold for triggering material loss reviews and consider the themes from those reviews (e.g., timeliness and forcefulness of intervention) to improve performance.
1.6 Cooperation	Strengthen channels for cooperation, coordination, and learning from best practices—within and between FBAs and functional supervisors.
3. Licensing criteria	Strengthen interagency agreement to prevent inappropriate charter conversions. Monitor developments to see if said agreement needs further strengthening. Deepen assessment and presentation to chartering decision-makers on the operational plan for the applicant bank. Increase the (absolute) minimum capital requirement for new banks

Reference Principle	Recommended Action
6. Capital adequacy	Work with the BCBS and domestically to strengthen the definition of what counts as Tier 1/core capital especially for holding companies. Revisit ability for banks and thrifts to have a large part of their Tier 1 capital composed of intangibles by capping the percentage allowed at a lower level. Put in place formal capital rules for SLHCs.
7. Risk management process	Conduct regular inter-agency horizontal detailed assessment of all risk monitoring, management and risk governance improvements at major complex banking groups. Include detailed testing of the robustness of improvements. Include all large complex banking organizations in these regular assessments. Publish regular reports and guidance to reinforce supervisory expectations. Ensure adequate ongoing resources for these reviews.
8. Credit risk	Develop a clear comprehensive strategy to reduce the extent and severity of credit risk problems resulting from a future credit cycle and building on (and extending across agencies) improvements in credit risk monitoring and surveillance already started. This strategy should address: timeliness and forcefulness of supervisory interventions, timeliness of guidance, revisiting whether guidance needs to occasionally contain specific limits to be effective, consistency of follow-up on new guidance; ability of the FBAs to intervene to make their views known about systemic weaknesses in credit risk management practices or in contributing polices that they do not control but that may need to be addressed by authorities more broadly; strengthen inter-agency processes to enhance collective assessment of emerging problems; and, ensure that sufficient specialist resources are available to assess complex credit risk matters in smaller and mid-size, as well as larger banks.
10. Large exposure limits	Include all exposures within the limits and reporting of large exposures. Strengthen reporting requirements on large exposures. Advance supervisory guidance further on sectoral and geographical concentration risk identification and management.
11. Exposure to related parties	Strengthen regulations on board oversight and involvement. Enhance reporting requirements to board and to the supervisors. Lower the current limit on the aggregate amount of loans to all insiders. (It now equals a bank's own funds plus "surplus" funds.) Incorporate all exposures to insiders (and affiliates) in the definition of insider transactions and in the limits.

Reference Principle	Recommended Action
13. Market risks	Complete the current horizontal assessment of the Market Risk Amendment and determine how much further in-depth horizontal review of market risk and valuation improvements at major banks is required. Conduct regular, horizontal, in-depth assessments of banks' progress in market risk enhancements.
14. Liquidity risk	Make sure the crisis-driven improvements in banks and supervisors liquidity risk processes are transitioned into organized, sustainable, improved liquidity risk management and supervisory monitoring and assessment. Update the supervisory program, and conduct regular supervisory assessments of risk management and crisis and contingency plans at banks.
15. Operational risk	Consider a more holistic and structured approach to operational risk assessment, utilizing enhanced cross-agency mechanisms.
16. Interest rate risk in the banking book	Consider the capacity to improve the assessment of interest rate risk by introducing a more consistent measurement approach.
18. Abuse of financial services	Rectify certain CP 18-relevant deficiencies as identified by the FATF.
19. Supervisory approach	Improve the capacity for group-wide oversight of financial groups, including unregulated entities. Introducing domestic "supervisory colleges" involving all main regulators (not just the FBAs) of major banking groups may assist, although broader reform is necessary. An overhaul of risk rating systems, with a view to improve their capacity to distinguish between banks, is also recommended.
20. Supervisory techniques	Review, perhaps under the auspices of the FFIEC, existing supervisory manuals and processes to remove unnecessary differences and develop a "best of breed" approach.
21. Supervisory reporting	Review the solo reporting requirements to ensure prudential requirements can be monitored relative to an individual bank's balance sheet. Also consider the implications of U.S. GAAP for the effectiveness of supervision and the PCA regime.
22. Accounting and disclosure	Consider the introduction of statutory reporting ("whistleblower") obligations for external auditors, along with associated protections.
24. Consolidated supervision	Make changes in legislation and practices to ensure effective conduct of consolidated supervision of financial groups. Also, regulatory limits and reporting of adherence to those should be introduced on the consolidated group level, including at the holding company level, for large exposures, and related lending.

V. Authorities' Response to the Assessment

26. The U.S. authorities wish to express their appreciation to the IMF and its assessment teams for the dedication, time and resources committed to this assessment. The authorities strongly support the Financial Sector Assessment Program, which promotes the soundness of financial systems in member countries and contributes to improving supervisory practices around the world. The U.S. assessment has presented a challenging and complex task, and the IMF has worked professionally and in a spirit of collaboration to produce the assessment. The U.S. authorities appreciate the opportunity to provide the following comments.

27. As recognized by the Report, it is important to consider the U.S. assessment in context. The assessment follows in the wake of a severe financial crisis and economic downturn, and these severe stresses have tested the resilience of the U.S. financial sector and its supervisory framework. The assessment properly holds the United States to a higher standard, given the maturity, complexity, and significance of our financial sector. Additionally, it is important to recognize that the United States is the first highly complex economy to have been evaluated under the Core Principles as updated in 2006. The revised Core Principles place a greater emphasis on risk management, and the methodology requires assessors to consider the practices of banks as well as the policies and practices of banking agencies. The authorities are pleased that, even under these more stringent Core Principles, and when applying a higher standard to the complex U.S. financial system, the IMF's assessment of the U.S. system is that it is broadly in compliance with the Core Principles. The few areas that are identified for improvement are acknowledged and are recognized; much is underway to address these known concerns.

28. The Report acknowledges that, while many of the identified weaknesses are being addressed by the U.S. federal banking agencies and by legislative reforms, it was not possible for the assessment to incorporate, or give credit for, these actions or reforms. For example, the Report acknowledges that a number of the firms that experienced major problems (i.e., the government sponsored enterprises and various investment banks before they became BHCs) were not subject to oversight by any of the federal banking agencies and that failures in risk management at these companies were a major contributor to the financial crisis. The U.S. federal banking agencies have, in multiple forums, expressed their desire to move forward expeditiously with legislative changes to address identified concerns.

29. Aside from supporting legislative reforms the U.S. federal banking agencies are making substantial progress in the oversight of risk management practices. Initiatives related to credit, market, and liquidity risk, and consolidated supervision are recognized in the Report. These changes, combined with proposals for legislative reforms that would enhance the ability to supervise institutions on a consolidated basis, address many of the deficiencies cited. It is equally important, however, to acknowledge that actions supervisors took as the magnitude of the crisis became clear and have continued to take since the crisis, are at least

as important in judging the supervisors' effectiveness as any assumptions made about their oversight based on risk management weaknesses of supervised institutions.

30. The authorities believe each FBA has both statutory and organizational mandates and objectives which are clear and do provide specific roles and authority for the conduct of supervision of regulated entities. In addition, each agency has very specific authority to take steps to compel organizations to make improvements in risk management and other processes and as noted in the DAR we are actively working with institutions to improve these processes as well as regulatory policy in these same areas.

31. The IMF's assessment of CP 6, the Capital Adequacy standard, does not fully reflect aspects of U.S. bank supervision, both immediately before the crisis and once the crisis emerged. U.S. banks are held to a higher capital standard than international standards because of U.S. Prompt Corrective Action law and regulation. Currently, approximately 96 percent of U.S. banks, representing approximately 99 percent of total bank assets, hold 50 percent or more capital than international minimums. In addition, the quality of capital held by U.S. banks has generally been higher than in many other jurisdictions. Prior to the crisis most U.S. banks, including the largest, had Tier 1 capital composed mostly of common equity (80–90 percent or higher). In contrast, banks in other countries had common equity levels closer to the Basel predominance standard of 50 percent common shareholders' equity with the remaining component of Tier 1 capital generally consisting of tax-deductible hybrid securities. Moreover, as a result of the Supervisory Capital Assessment Program (SCAP), the largest U.S. banks now have risk-based ratios of Tier 1 capital and Tier 1common equity that far exceed Basel minimum capital requirements.

32. Finally, the federal banking agencies have taken a number of substantive actions that are not fully reflected in the Report. These include:

- The SCAP stress assessment on the 19 largest bank holding companies, which together hold two-thirds of the assets and more than one-half of the loans in the U.S. banking system. The SCAP was notable among stress tests conducted by other countries in its scope, rigor, intensity, breadth, and transparency, and resulted in large banks raising a substantial amount of common equity capital which strengthened the level and quality of bank capital in the United States;

- Joining international efforts to initiate supervisory colleges for large, globally active U.S. banks;

- Directing large banks to improve their ability to aggregate risks across legal entities and product lines to identify potential risk concentrations and correlations, and requiring improved contingency funding plans;

- Conducting targeted, leveraged lending reviews at the largest syndication banks, focusing on syndicated pipeline management, stress testing, and limit setting

- Conducting high quality implementation of Basel II;

- Issuing and implementing interagency guidance on subprime and non-traditional mortgages; and

- Initiating new data gathering, e.g., a project that provides data on over 60 percent of residential mortgages serviced in the United States.

33. The U.S. authorities appreciate the Report's recommendations, and will review them carefully. They will take action where they have authority, including in the areas of enhancing communication and information-sharing among the agencies, ensuring more effective oversight of systemic risks, and requiring increased liquidity buffers at systemically important institutions. They look forward to a continuing dialogue as they jointly seek to improve the stability and effective supervision of the global financial services sector.

FINANCIAL SECTOR ASSESSMENT PROGRAM

UNITED STATES OF AMERICA

THE IOSCO OBJECTIVES AND PRINCIPLES OF SECURITIES REGULATION

REPORT ON STANDARDS AND CODES (ROSC)

JULY 2010

INTERNATIONAL MONETARY FUND
MONETARY AND CAPITAL MARKETS DEPARTMENT

Contents Page

GLOSSARY

ATSs	Alternative Trading Systems
BDs	Broker Dealers
BSA	Bank Secrecy Act
CEA	Commodity Exchange Act
CFMA	Commodity Futures Modernization Act of 2000
CFTC	Commodity Futures Trading Commission
CIS	Collective Investment Schemes
CPSS	Committee on Payment and Settlement Systems
CPOs	Commodity Pool Operators
DCM	Designated Contract Market
DOJ	Department of Justice
EBOTs	Exempt Boards of Trade
ECM	Exempt Commercial Market
FCM	Futures Commission Merchant
FINRA	Financial Industry Regulatory Authority
FSAP	Financial Sector Assessment Program
FSSA	Financial System Stability Assessment
GAAP	Generally Accepted Accounting Principles
GAAS	Generally Accepted Auditing Standards
IAs	Investment Advisers
IBs	Introducing Brokers
IG	Inspector General
IOSCO	International Organization of Securities Commissions
IOSCO MMOU	IOSCO Multilateral Memorandum of Understanding
MOU	Memorandum of Understanding
NFA	National Futures Association
NMS	National Market System
OCIE	Office of Compliance, Inspections, and Examinations (SEC)
OIG	Office of Inspector General
OTC	Over-the-Counter
PCAOB	Public Company Accounting Oversight Board
SEC	Securities and Exchange Commission
SROs	Self-regulatory Organizations

I. Introduction and Methodology

1. **An assessment of the United States securities and futures market regulatory system was conducted by Susanne Bergsträsser, Richard Britton, and Tanis MacLaren from October 7 to November 3, 2009 as part of the Financial Sector Assessment Program (FSAP).**[1] The assessment was conducted based on the International Organization of Securities Commissions (IOSCO) Objectives and Principles of Securities Regulation and the associated methodology adopted in 2003.[2]

2. **The conclusions below are based on information and findings as of November 2009.** Important reforms have been introduced in the past year, some of which have already been implemented and are beginning to take effect. However, while these promise to address many of the issues identified in this assessment, it would still be important to establish a consistent track record before their efficacy could be judged.

3. **The assessment was carried out in a post-crisis environment, which had an impact on the findings.** The financial crisis of 2008 exposed a number of underlying issues in the U.S. financial markets, some of which were causally related to the crisis—such as the lack of ability of U.S. investment banks to withstand shocks to liquidity—while others arose as a result of secondary effects of the crisis—such as the exposure of a giant fraud because of the sharp contraction of investment flows. As a result, the regulatory and supervisory framework was tested to an unusual degree, revealing weaknesses that might otherwise have gone undetected.

4. **The assessment also benefited from the uncommon level of transparency in the United States.** The mission had access to a wide range of official reports, internal evaluations of the regulatory framework, and information on regulatory practice. Moreover, the U.S. system is subject to a considerable degree of high quality and critical analysis from the private sector, which also informed the assessment.

5. **The legislative framework in the jurisdiction provides a comprehensive, but complex, framework for the activities undertaken in the public markets**. The responsibility for regulation of the markets at a federal level is split between two agencies. The Commodity Futures Trading Commission (CFTC) is responsible for the supervision of futures markets—the futures exchanges, intermediaries and products offered in the public markets. The Securities and Exchange Commission (SEC) regulates securities markets, issuers, and participants. In addition, there are state securities regulators involved in both licensing and enforcement activities. Further, other law enforcement agencies, such as the

---

[1] For further discussion see the accompanying Financial System Stability Assessment (FSSA), (www.imf.org).

[2] The underlying Detailed Assessment Report was published in May 2010 and is available at http://www.imf.org/external/pubs/cat/longres.cfm?sk=23867.0.

Department of Justice (DOJ) and state Attorneys General, participate in enforcement activities. The CFTC and SEC rely to a significant degree on self-regulatory organizations (SROs) for the regulation of the markets and their participants, including exchanges, clearing organizations, and securities or futures associations, each of which has authority over their members' activities.

II. Preconditions for Effective Securities Regulation

6. **The general preconditions for effective securities regulation in the United States are present.** There are no significant barriers to entry and exit for market participants. Competition is encouraged and foreign participation is welcomed. The legal and accounting system supports the implementation of requirements and effective regulation of market participants. The commercial law is up-to-date and is capable of supporting the demands posed by cross-border trade, modern financial instruments, and current corporate governance standards. The legislation regarding bankruptcy, insolvency, and winding up in the jurisdiction and the professionals associated with those matters are sophisticated.

III. Main Findings

7. **Complexity is a key challenge.** The U.S. securities and futures markets are very complex. The regulatory framework and system that have developed are equally complex. This is evident in the division of responsibility between the agencies and in the way that each is structured. There is a high degree of specialization evident at each agency. Although specialization may have benefits in a complex environment, regulators may be challenged to appropriately assess overall issues that cross specialization lines—both within an agency and between agencies. A greater focus on systemic issues relating to both securities and futures markets would make the overall regulatory system more robust.

8. **The chairmen of the CFTC and SEC have both recognized the need for change and have taken steps toward strengthening their institutions.** However, institutional culture is not easy to transform. Moreover, the agencies are under strong and continuous pressure, including from the industry; their challenge will be to respond to market developments in a timely fashion and set a reform agenda in an independent manner.

9. **Issues related to complexity and the need for reform manifest themselves both in specific areas and at a system-wide level.** The specific areas of concern include the enforcement function and the regulation of over-the-counter derivatives markets; but the overarching issue is the need to work toward simplification of internal and institutional structures. Within the agencies, better internal management structures and improved communication between departments should be established to facilitate a regulatory culture of continuous learning and response.

10. **Principles relating to the regulator (Principles 1–5):** The responsibilities of the CFTC and SEC are clearly stated in law. However, there are gaps in coverage of the wide

range of activity in the U.S. markets and in the scope of authority of both agencies and there are differences between the futures and securities regimes in how similar instruments are regulated. There are also gaps between the authority of the SEC and the Federal Reserve with respect to the regulation and oversight of investment bank holding companies, which adds to the fragility of the overall system. The legal system grants the CFTC and SEC sufficient protection for their independence and the agencies operate independently on a day-to-day basis, and there is a strong system of accountability to Congress. However, neither agency has sufficient funding nor sufficient assurance of continuing funding levels to be able to commit to long-term capital projects, such as building new market surveillance systems, which are necessary to keep pace with changes in the industry. The CFTC and SEC activities and processes are transparent and there is public consultation regarding their regulations and CFTC and SEC staff and commissioners are subject to codes of ethics and other requirements to ensure a high standard of conduct.

11. **Principles relating to self-regulation (Principles 6–7):** SROs play a significant role in the supervision of markets and their participants. Exchanges and clearing organizations and registered associations all perform important self-regulatory functions. SROs are subject to an authorization regime based on eligibility criteria that address issues of integrity, financial viability, capacity, governance, and fair access—although the regimes are different for exchanges in the securities and futures markets. The CFTC has insufficient authority regarding exchanges following the coming into force of the Commodity Futures Modernization Act of 2000 (CFMA). Moreover, the CFTC has limited ability to intervene in the introductions of a new product or changes in rules, such as those governing trading and there is no opportunity for stakeholders to have their views taken into account in advance of a new product listing or rule change. These deficiencies have been recognized and are now being addressed via recommendations for legislative change.

12. **Principles relating to enforcement of securities regulation (Principles 8–10):** Both agencies have extensive enforcement authority.The anti-fraud provisions under the U.S. federal securities laws, as enforced by the SEC via Rule 10b–5[3] and supported by the courts, have proved to be a very effective tool for prosecuting offences under the securities laws. Private litigation is also an unusually powerful tool for securing compliance and obtaining redress in case of breach. The CFTC and SEC can conduct on-site inspections without prior notice and can obtain information of all types without the need for a court order. The agencies also have broad enforcement powers, including the power to seek injunctions, bring

[3] Rule 10b–5 under the Exchange Act makes it unlawful for any person, directly or indirectly, to use any device, scheme or artifice to defraud, to make any untrue statements of material fact or to omit to state a material fact necessary in order to make the statements made not misleading, and to engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.

an application for civil proceedings, and compel information and testimony from third parties. They also can impose administrative sanctions and refer matters to criminal authorities. The CFTC and SEC have substantial compliance and enforcement programs in place. Although the assessment identified significant shortcomings in the SEC enforcement program, the SEC's extensive and wide-ranging program to implement the Inspector General (IG)'s recommendations and other changes are beginning to generate improvements. Such efforts should be brought to a conclusion as a matter of high priority. Further, resources dedicated to the examination of SEC-registered Investment Advisers (IAs) (a program currently conducted solely by the SEC) are insufficient, thus reducing the effectiveness of the program.

13. **Principles for cooperation in regulation (Principles 11–13):** The CFTC and SEC have broad authority to share information with both domestic and foreign regulators, even without having Memoranda of Understanding (MOUs) in place. Both agencies are signatories of the IOSCO MOU and also have many bilateral MOUs in place with other regulators. The CFTC and SEC have the authority to assist foreign regulators in obtaining information that is not in their files, using the powers that are available for their own investigative activities.

14. **Principles for issuers (Principles 14–16):** Companies that issue securities in the public market must provide extensive financial information and other disclosure on initial offerings and most are subject to detailed continuing disclosure obligations in line with IOSCO standards. Liability provisions are in place to ensure that issuers are held responsible for all disclosure provided. This responsibility is enforced by the SEC, the exchanges, and by civil suits by investors. However, there is limited authority over municipal government issuers. Holders of voting securities of a public issuer are generally treated fairly.

15. **Principles for collective investment schemes (Principles 17–20):** Operators and marketers of CIS offered to the public are subject to registration requirements but the initial eligibility criteria for CIS and their operators should be more extensive, and should be demonstrated prior to registration. The initial and ongoing disclosure requirements for CIS are comprehensive; however, the update requirements under the Commodity Exchange Act (CEA) are not timely. Assets of CIS are valued in accordance with U.S. generally accepted accounting principles (GAAP) and verified by an independent auditor at least annually. The custodian of CIS assets is not required to be an arm's length party.

16. **Principles for market intermediaries (Principles 21–24):** There are minimum entry standards for all market intermediaries that include criteria relating to integrity. Capital and internal control requirements apply to futures commission merchants and broker dealers; these requirements are assessed prior to licensing by the SROs. Advisers are not subject to capital requirements or to operational capacity assessments prior to licensing. The applicable capital requirements vary by the chief risks undertaken by the intermediary (largely market and credit risk). The ability of the prudential requirements (capital formulae and risk

management requirements) to address the full range of risks present in some business models (funding, liquidity, reputational, and affiliate risks) appears to need improvement. The crisis brought to light weaknesses in the framework governing investment bank holding companies, but the conversion of the remaining entities into bank holding companies has eliminated the practical need for the securities regulators to address these problems immediately. There are procedures in place at both agencies to address failures of intermediaries, and these have been tested in practice.

17. **Principles for the secondary market (Principles 25–30):** Securities and futures exchanges are subject to authorization and oversight. Under the CEA, there are categories of futures trading systems that are exempt from authorization, although recent legislative amendments have enabled the CFTC to strengthen oversight of operational Exempt Commercial Markets (ECMs) where appropriate. In the securities markets, post-trade transparency (details of completed transactions) is comprehensive, as is publicly displayed liquidity or pre-trade transparency (best bids and offers). However, roughly a quarter of liquidity is not publicly displayed (i.e., dark pool Alternative Trading Systems (ATSs) and broker dealer internalization of trading on behalf of clients). The SEC's concern that a two-tier market may be emerging—that provides valuable order information on the best prices for National Market System (NMS) stocks only to selected market participants—is justified. Any proposed rule changes should be supported by independent factual evidence.

18. **Market surveillance by the securities and futures exchanges and Financial Industry Regulatory Authority (FINRA) is effective and has kept pace with technological developments in markets.** A comprehensive surveillance system for securities trading to be used by the exchanges, ATS, and the SEC (such as exists in the futures markets) would be beneficial for the detection of market abuse and also for identifying indicators of developing stress points. Market manipulation is generally well policed in both markets. Insider trading legislation should be more comprehensive in futures markets although the approach to insider trading for securities and futures should be different given the differences in the nature of the markets. Whether additional expansion of coverage is warranted, should be studied. While the IOSCO Principles do not require all markets in financial products to be transparent, the opacity of the over-the-counter (OTC) derivatives market contrasts with the relative transparency of OTC securities markets for equities and bonds.

Table 1. Summary Implementation of the IOSCO Principles

Principle	Assessment
Principle 1. The responsibilities of the regulator should be clearly and objectively stated.	The responsibilities of the CFTC and SEC are clearly stated in the laws. However, there are gaps in coverage of products and services in the market, differences in treatment of similar products, and gaps in the scope of each agency's authority.
Principle 2. The regulator should be operationally independent and accountable in the exercise of its functions and powers.	The CFTC and SEC are operationally independent. There is a strong system of accountability to Congress. The funding method for the authorities does not provide funding sufficient to meet their regulatory and operational needs on a long-term basis.
Principle 3. The regulator should have adequate powers, proper resources, and the capacity to perform its functions and exercise its powers.	Both authorities have extensive powers over their areas of responsibility, but there are gaps. The CFTC and SEC need additional resources in order to supervise the very large and complex U.S. securities and futures markets.
Principle 4. The regulator should adopt clear and consistent regulatory processes.	The CFTC and SEC are subject to a high degree of transparency including public consultation regarding their regulations. They are active on investor education.
Principle 5. The staff of the regulator should observe the highest professional standards.	The CFTC and SEC have developed codes of ethics. These include investment limitations on staff and, in the case of the SEC, reporting obligations. There are mechanisms to monitor compliance.
Principle 6 The regulatory regime should make appropriate use of SROs that exercise some direct oversight responsibility for their respective areas of competence and to the extent appropriate to the size and complexity of the markets.	The effectiveness of the regulatory regime is to a large degree dependent on the skills and resources of the SROs. They play a very significant role in the supervision of markets and their participants. Exchanges and clearing agencies perform important self-regulatory functions as do registered associations.
Principle 7. SROs should be subject to the oversight of the regulator and should observe standards of fairness and confidentiality when exercising powers and delegated responsibilities.	Following the coming into force of the CFMA, the CFTC has had insufficient authority over exchanges. This deficiency is now being addressed via recommendations for legislative change.
Principle 8. The regulator should have comprehensive inspection, investigation, and surveillance powers.	The CFTC and SEC have broad investigative and surveillance powers over regulated entities, exchanges, and regulated trading systems. They can conduct on-site inspections without prior

Principle	Assessment
	notice. They can obtain books and records and request data or information without a court order.
Principle 9. The regulator should have comprehensive enforcement powers.	The CFTC and SEC have broad enforcement powers. These include the power to seek injunctions, bring an application for civil proceedings, and compel information, documents, records, and testimony from third parties in the course of their investigations. They can impose administrative sanctions and refer matters to criminal authorities.
Principle 10. The regulatory system should ensure an effective and credible use of inspection, investigation, surveillance, and enforcement powers and implementation of an effective compliance program.	Significant shortcomings were identified in the SEC enforcement program. However the current extensive and wide-ranging program of change is beginning to generate improvements. Important elements, such as the restructuring of complaints handling processes remain "work in progress." The resources for the examination of registered IAs by the SEC are insufficient, thus reducing the effectiveness of this program. Resources for criminal prosecution of securities fraud are too limited.
Principle 11. The regulator should have the authority to share both public and non-public information with domestic and foreign counterparts.	The CFTC and SEC have broad authority to share information with both domestic and foreign regulators and both agencies have shared information extensively with international counterparties.
Principle 12. Regulators should establish information-sharing mechanisms that set out when and how they will share both public and non-public information with their domestic and foreign counterparts.	The CFTC and SEC are signatories of the IOSCO Multilateral Memorandum of Understanding (MMOU). They also have bilateral MOUs with other regulators.
Principle 13. The regulatory system should allow for assistance to be provided to foreign regulators who need to make inquiries in the discharge of their functions and exercise of their powers.	The CFTC and SEC have authority to assist foreign regulators in obtaining information, even when that information that is not in their files, and regularly do so.
Principle 14. There should be full, timely, and accurate disclosure of financial results and other information that is material to investors' decisions.	There is extensive initial and ongoing disclosure for most public issuers. However, there is limited direct authority over municipal government. On-going disclosure requirements do not apply to all public issuers.
Principle 15. Holders of securities in a company should be treated in a fair and equitable manner.	Holders of voting securities of a public issuer generally are treated fairly.
Principle 16. Accounting and auditing standards should be of a high and internationally acceptable quality.	U.S. GAAP is widely recognized as an acceptable accounting standard for use by public issuers and the generally accepted auditing standards (GAAS) of the U.S. Public Company Accounting Oversight Board (PCAOB) also are widely accepted globally.
Principle 17. The regulatory system should set standards for the eligibility and the regulation of those who wish to	Operators and marketers of CIS are subject to registration requirements but eligibility criteria

Principle	Assessment
market or operate a collective investment scheme.	are not comprehensive. In addition, at present the resources and internal controls of a CIS would be subject to an examination by the regulator only sometime after the fund began operation, but are not preconditions to the original approval. Resources at the SEC, CFTC, and National Futures Association (NFA) do not allow routine examination of the operators to take place with sufficient frequency.
Principle 18. The regulatory system should provide for rules governing the legal form and structure of collective investment schemes and the segregation and protection of client assets.	There are requirements governing the legal form of Collective Investment Schemes (CIS) and addressing protection of client assets. Notice of changes that affect investor rights should be given prior to the effective date of the change, whether or not investor approval is required. The material change requirements set out in the CEA are not timely. The custodian of a CIS's assets is not required to be an arm's length party.
Principle 19. Regulation should require disclosure, as set out under the principles for issuers, which is necessary to evaluate the suitability of a collective investment scheme for a particular investor and the value of the investor's interest in the scheme.	The disclosure required for public commodity pools and securities CIS is extensive and is updated throughout the period when the CIS is offering its securities to the public. However, the CEA requirements regarding updating the Disclosure Documents are not timely. The information disclosed is sufficient for investors to assess suitability and the value of their investments in the CIS.
Principle 20. Regulation should ensure that there is a proper and disclosed basis for assets valuation and the pricing and the redemption of units in a collective investment scheme.	Assets of CIS are valued in accordance with U.S. GAAP and verified by an independent auditor at least annually. The prices of the instruments are made available to the investors periodically. No guidance is provided on how pricing errors in commodity pools should be addressed.
Principle 21. Regulation should provide for minimum entry standards for market intermediaries.	There are minimum entry standards for market intermediaries but only some types of intermediaries are subject to standards relating to financial capacity or assessed with respect to their internal controls, risk management, and supervisory systems in place before licensing.
Principle 22. There should be initial and ongoing capital and other prudential requirements for market intermediaries that reflect the risks that the intermediaries	Capital requirements apply to Futures Commission Merchants (FCMs), non-guaranteed Introducing Brokers (IBs,) and BDs that vary by

Principle	Assessment
undertake.	certain of the risks undertaken by the firm. The capital formulae and other prudential requirements do not address fully the complete range of risks to which a firm may be exposed.
Principle 23. Market intermediaries should be required to comply with standards for internal organization and operational conduct that aim to protect the interests of clients, ensure proper management of risk, and under which management of the intermediary accepts primary responsibility for these matters.	There are standards of conduct and internal control requirements for the protection of clients and intermediaries. The risk management expectations for broker dealers (BDs) and FCMs should be reexamined, particularly with regard to management of liquidity, funding, and reputational risks under stress.
Principle 24. There should be a procedure for dealing with the failure of a market intermediary in order to minimize damage and loss to investors and to contain systemic risk.	There are procedures in place at both the CFTC and SEC to address failures and these have been put to the test.
Principle 25. The establishment of trading systems including securities exchanges should be subject to regulatory authorization and oversight.	Securities and futures exchanges and trading system operators are subject to authorization and oversight. However, under the CEA, there are categories of trading systems which are exempt from authorization and are not registered with, or designated, recognized, licensed, or approved by the CFTC. The authorization of so called “dark pool” alternative trading systems under Regulation ATS, whereby they are not required to publicly display their best-priced orders in NMS stocks, does not provide for adequate pre-trade transparency of trading interests. Thus, the consultation currently being conducted by the SEC on equity market structure, including issues related to “dark pools,” is timely.
Principle 26. There should be ongoing regulatory supervision of exchanges and trading systems, which should aim to ensure that the integrity of trading is maintained through fair and equitable rules that strike an appropriate balance between the demands of different market participants.	The ongoing supervision of ECMs is an excessively light-touch regime, although the CFTC has recently sought and obtained regulatory change which has enabled it to strengthen oversight where appropriate. CFTC needs explicit statutory authority to impose financial resource requirements on designated contract markets (DCMs). A more holistic approach to capital adequacy requirements for exchanges is preferable.
Principle 27. Regulation should promote transparency of trading.	The CEA and CFTC regulations have not been updated to reflect modern concepts of transparency. However, the practice in futures markets, consistent with the Principle, is real time publication.

Principle	Assessment
	Transparency in the securities markets is comprehensive. There is public display of pre-trade best bids and offers and liquidity. However, 25 percent of liquidity is not publicly displayed (i.e, dark pool ATSs and broker dealer internalization of trading on behalf of clients).
Principle 28. Regulation should be designed to detect and deter manipulation and other unfair trading practices.	Insider dealing law is too narrowly focused in the derivatives markets. Changes already have been proposed, but additional study is recommended to consider whether further restrictions would be appropriate. Market surveillance is carried out to a high standard by the exchanges and FINRA, and is particularly comprehensive in the futures markets. The SEC and CFTC are constrained by technology limitations.
Principle 29. Regulation should aim to ensure the proper management of large exposures, default risk and market disruption.	The timely and comprehensive information flows available in futures markets provide for effective early warnings. In securities markets, tracking large exposures and other potential sources of market disruption is more difficult.
Principle 30. Systems for clearing and settlement of securities transactions should be subject to regulatory oversight and designed to ensure that they are fair, effective, and efficient and that they reduce systemic risk.	A separate CPSS-IOSCO assessment was conducted for the securities markets. Arrangements in the futures markets were not assessed.

Table 2. Recommended Action Plan to Improve Implementation of the IOSCO Principles

Principle	Recommended Action
Principles relating to the regulator (Principles 1–5)	Decisions should be taken promptly on the recommendations of the Joint Report to enhance investor protection and improve cooperation between the CFTC and SEC. Legislative and regulatory gaps identified in the Joint Report should be closed. Funding of both authorities needs to be increased and the method of funding should be reviewed. The annual appropriations process seems inadequate to meet the needs for funding necessary long term projects. Annual funding makes it difficult to commit to major investments in software development which takes place over several years. Consideration should be given to moving to direct self-funding (i.e., ability to capture fee income for own funding rather than remitting it to general government revenue and relying on a government budget). The total fee income at the SEC presently generated from its activities far exceeds the combined budgets of the SEC and the CFTC. Taking into account the size and complexity of the markets and the number of registrants they oversee, both agencies need more resources—human, informational and technological—to fulfill their regulatory functions efficiently and effectively.
Principles relating to self-regulation (Principles 6–7)	As recommended in the Joint Report, the CEA should be amended to provide the CFTC with greater powers over product and rules approval of the futures exchanges and to provide greater scope for public consultation prior to their introduction. Corrective measures should recognize the need to balance prior product or rule approval with the exchanges' ability to benefit from their innovative endeavors in a competitive market. The CFTC should remain aware of industry concerns regarding the retention of member regulation by demutualized DCMs. The SEC should consider delegating sole registration authority for BDs to FINRA.
Principles relating to enforcement of securities regulation (Principles 8–10)	Although many improvements have been made or are under way within the SEC, the current program in the Enforcement Division and Office of Compliance, Inspections and Examinations (OCIE) to implement the 21 recommendations set out in the 2009 report of the Office of Inspector General (OIG) and other improvements should be completed as a matter of high priority. The SEC also may want to consider adding enforcement staff with more accounting and economics backgrounds. Mixed teams with different skill sets and experience in the Enforcement Division could enhance its performance.

Principle	Recommended Action
	The number of staff dedicated to the periodic examination of registered IAs (whether at the SEC alone, or in combination with FINRA and/or state regulators) should be increased at least to a level where the percentage of IAs examined annually matches the percentage of BDs examined by the SEC and FINRA. The enforcement division of the CFTC would benefit from more resources. Given the current limited scope of its remit and the integrated market surveillance systems it operates in close cooperation with the DCMs this is not a pressing problem though it will become one if its remit is expanded (e.g., to include OTC derivatives). The securities unit of the fraud section in the criminal division of the DOJ should be given additional resources to prosecute securities fraud.
Principles for issuers (Principles 14–16)	Continuous disclosure requirements should apply to all public issuers. The SEC should have the power to mandate both initial disclosure requirements and on-going obligations directly on municipal government issuers.
Principles for collective investment schemes (Principles 17–20)	The eligibility criteria for CIS and their operators should include the human and technical resources to carry out the required functions, the appropriate financial capacity and adequate internal management and controls. These should be assessed before a CIS or its operator is permitted to begin operations. The resources at the relevant regulators (statutory or SRO) for routine examinations of operators and CIS should be increased. Commodity Pool Operators (CPOs) should be required to have policies in place to avoid or mitigate conflicts. Notice of changes that affect investor or participant rights should be given prior to the effective date of that change, whether or not prior approval is required. Prompt changes to commodity pool disclosure documents should be required when material changes occur. Consideration should be given to requiring the custodian of a CIS's assets to be an arm's length party. Requiring an auditor of a CIS to have relevant prior experience might also be considered. The CFTC should provide guidance to the industry on how to address pricing errors in the valuation of commodity pools.
Principles for market intermediaries (Principles 21–24)	The threshold for review of the fitness of control persons of an intermediary should be the same under the CEA and Exchange Act; the lower 10 percent threshold should be adopted. There should be an assessment of the back-office capabilities, internal controls and policies and procedures of all futures intermediaries and IAs prior to the grant of registration. FINRA should have clear authority to examine and address all securities-related activities of members, including their registered IA

Principle	Recommended Action
	activities. Consideration should be given to requiring that the custodian be at arm's length to the IA. The proposed changes to the futures capital rules to address gaps relating to cleared OTC derivatives and improve the sensitivity of the formula to the actual risks undertaken by the firm should be implemented promptly. The capital rules and other prudential requirements, such as risk management standards, should be reexamined to ensure all risks, including funding, reputational, liquidity and affiliate risks are addressed fully. The regulators should strive to ensure that both capital and risk management requirements adequately address risks posed when firms are under stress. Consideration should be given to reviewing the rules governing BD custody of client assets. The CFTC should have authority to review and approve/disapprove margin requirements set by the DCMs.
Principles for the secondary market (Principles 25–30)	In addition to pursuing legislative change to secure the enhanced powers as set out in the Joint Report the CFTC should consider seeking an authorization power over entities seeking to set up ECMs and Exempt Boards of Trade (EBOTs). However ongoing legislative initiatives are considering the abolition of the ECM and EBOT market categories. The SEC's current broad review of equity market structure to determine whether the rules have kept pace with changes in trading technology and practices should be prioritized with a view to encouraging the broadest public debate while reaching actionable conclusions promptly. It will be essential that the review be conducted on the basis of comprehensive and independent evidence in order to establish accurately the needs of investors of all classes. The recommendations in the Joint Report regarding insider dealing and Chinese Walls in derivatives markets should be implemented. The CFTC should undertake a study to consider whether expansion of the insider trading prohibition in the futures markets beyond the recommendation in the Joint Report is warranted given the current state of the markets, contracts and investors. Such a study would complement the current debate in Europe as to the appropriate coverage of insider trading laws in derivatives markets. The SEC should review the extent to which the absence of additional offences of insider trading is a limiting factor in the SEC's enforcement effort in this area. Current discussions among the securities exchanges and FINRA on creating a consolidated surveillance structure to oversee the consolidated market should be given greater priority with a view to reaching a positive conclusion in a timely manner.

Principle	Recommended Action
	Consideration should be given to amending the regulations to provide the SEC and the securities exchanges with accurate and timely information on large holders of and traders in securities as the CFTC and the futures exchanges have in their markets. This would support surveillance and identify emerging market stress points in a timely fashion. The SEC should join the CFTC in considering the introduction of an explicit and comprehensive financial resource requirement for exchanges.

IV. AUTHORITIES' RESPONSE TO THE ASSESSMENT

19. The U.S. authorities appreciate the effort, time, and resources committed by the IMF to prepare the FSAP. The FSAP is intended to promote the soundness of financial systems in member countries and to contribute to improving supervisory practices around the world. The U.S. assessment has presented a challenging and complex task. In light of the financial crisis as well as the maturity, complexity and significance of the U.S. financial system, we understand that the U.S. regulatory system was subject to a more stringent standard than in previous IMF assessments. Nevertheless, it is essential that regulators hear from third parties to gauge their effectiveness. We are grateful for the opportunity to provide the following comments regarding the IMF's Report, although as discussed below we take exception to a number of the findings.

20. As recognized in this Report, the U.S. FSAP is occurring at a critical and extraordinary time. According to the G20 leaders in April 2009, major failures in the financial system, including in regulation and supervision, were fundamental causes of the crisis. The last 18 months have taught regulators around the world much about the new realities of our financial markets. We have learned the limits of foresight and the need for candor about the risks we face. We were reminded that transparency and accountability are essential. Only through strong, intelligent regulation—coupled with aggressive enforcement mechanisms—can we fully protect the American public and keep our economy strong. Given the global nature of markets, we recognize that U.S. leadership remains critical to the stability of markets worldwide.

21. The financial crisis left regulators with enormous challenges and a heightened interest in strengthening regulation. Perhaps most importantly, as the Report recommends, comprehensive regulatory reform of the OTC derivatives marketplace is essential. The financial crisis highlighted how opaque markets can threaten the financial system and the broader public. The U.S. authorities agree with the Report's strong recommendation for increased resources for the CFTC and the SEC should the U.S. Congress expand the agencies' missions to include the regulation of OTC derivatives. The CFTC and SEC

additionally need greater resources to keep up with the growth of securities and futures markets in the United States. The U.S. authorities also agree with the assessment that the CFTC and SEC should enhance cooperation and coordination and already have taken steps to do so.

22. While change is needed, the U.S. regulatory system nevertheless helped ensure that the world's largest and most complex exchange-listed equity, commodity futures, and options markets continued to function properly and withstood the ultimate stress test during the financial crisis. The system has served as a model for regulatory authorities worldwide. Moreover, some of the proposed reforms to address risk in OTC derivatives—for example, requiring standardized products to trade on regulated trading platforms and to be cleared by central counterparties—reflect long-standing elements in the U.S. approach to regulating financial markets.

23. In addition to supporting reform, U.S. regulators have taken action under existing authority to remedy problems and to make improvements. For example, in the area of disclosure, the SEC proposed new rules that would improve the quality and timeliness of disclosure in municipal markets. In the area of investment management, the SEC sought to provide greater protections to investors by adopting new custody control rules that include surprise inspections to verify assets held by money managers. Finally, in the past year, the SEC launched a robust and vigorous review of equity market structure, including issues such as dark pools. The CFTC is continuing to improve and extend its world-class system of risk surveillance by requiring large trader reporting in the cleared OTC markets. This effort will allow the CFTC to conduct financial surveillance in this area consistent with its existing risk program for on-exchange trading.

24. The overall ratings in the Report, however, do not reflect the CFTC's and SEC's regulatory successes and, in some cases, suggest a misunderstanding of the U.S. regulatory system. Thus, the Commissions strongly disagree with many of the ratings in the Report. By way of example, while the IOSCO Principles recognize that regulators may use different approaches to accomplish the same objectives, the Report's rating on market intermediaries is based on the assumption that every intermediary must be regulated the same way. That is, they must undergo an extensive review prior to registration. This requirement, however, cannot be found in the Principles or the assessment Methodology. The Report rejects a legitimate risk-based approach to a registration requirement and oversight of futures and securities intermediaries without evidence that the approach is ineffective. The Report also states that capital requirements for futures and securities firms do not fully address risk, yet provides no evidence that the CFTC's and SEC's current requirements do not already exceed recognized international best practice as reflected in the Principles.

25. In particular, the Report suggests that only systems that call for review of the "fitness and properness" of CIS operators are acceptable. The Report finds that the regulatory framework in the United States does not address the adequacy of the CIS operators' human

and technical resources, financial capacity and internal management and controls. However, this finding does not take into account key and unique features of the U.S. system. The U.S. system mandates disclosure by CIS operators and also relies on oversight by a separate entity, a CIS board, which generally consists of a majority of independent directors. The CIS board serves as an initial check on the fitness, resources, and internal controls of the CIS operator. Moreover, both the CIS operators and CIS boards are subject to fiduciary duties, which are enforced by the SEC and by private litigants. This system offers an ongoing review of the fitness, resources, and internal controls of a CIS operator instead of a one-time "fit and proper" check. The Report disregards these important features of U.S. market regulation, and the effects they have on how regulated entities operate.

26. As a related matter, the IOSCO Principles make clear that they apply to futures markets "where the context permits." For instance, the Principles relating to CIS were written for publicly offered funds, such as mutual funds. The CIS Principles were not intended to cover privately-offered funds, such as the vast majority of CFTC-regulated commodity pools. The pools that are publicly offered represent a small percentage of total pools regulated by the CFTC. The ratings in this area are misplaced given the de minimis number of publicly offered funds.

27. In addition, some of the Report's adverse conclusions about the U.S. regulatory system are not based on objective criteria. For example, the Report finds that per Principle 10 the U.S. system fails to "ensure an effective and credible use of inspection, investigation, surveillance and enforcement powers." This conclusion appears to be based solely on an SEC OIG Report issued in August 2009 that reviewed the failings of a specific high-profile investigation, and then extrapolates those failings to all SEC enforcement activities. In so doing, the Report overlooks the SEC's overall success in the area of enforcement. In fiscal year 2009, SEC enforcement actions yielded: (1) orders that required wrongdoers to disgorge ill-gotten gains in the amount of approximately US$2.09 billion; (2) orders that imposed money penalties on wrongdoers in the amount of approximately US$345 million, a 35 percent increase over the previous fiscal year; and (3) the filing of 664 cases against 1,787 persons. SEC enforcement actions also have resulted in the return of billions of dollars to injured investors since the agency received "Fair Fund" authority in 2002. During fiscal year 2009 alone, the SEC distributed approximately US$2.1 billion to harmed investors from both disgorgement funds and Fair Funds.

28. These performance measures are a testament to the credibility and effectiveness of the SEC enforcement program in relation to the U.S. securities markets—a level of enforcement activity and investigative aggressiveness that far exceeds that of any other securities regulator in the world. These facts are inconsistent with a conclusion that the SEC enforcement program broadly fails to satisfy Principle 10. Granted, the metrics set forth above may not be the only objective measures by which to judge the effectiveness of the SEC's enforcement program. But, the Report fails to articulate any objective metrics on which to base the rating.

29. To be sure, the OIG Report highlights a major failure. The SEC, however, has taken action in response. In the past year, the SEC, among other things, restructured the Enforcement Division and streamlined its procedures. The SEC also took steps to improve its inspection program and place greater reliance on risk assessment. The SEC is actively working to improve its technology and modernize the way it handles the massive number of tips and complaints it receives each year. The Report's rating fails to give full credit for these improvements. In short, the effectiveness of an enforcement program should not be measured by zero tolerance for failure. There are many effective criminal justice systems around the world that are held in high esteem, not because of an absence of crime or a perfect record, but because, among other things, they apply considerable resources and visible effort to prevent, investigate, and prosecute crime.

30. In conclusion, the SEC and CFTC recognize a number of the areas that the IMF identified for improvement. Much is already underway to address these concerns. However, these types of suggestions in the Report are the exception rather than the rule.

31. Further, the SEC believes that the Report's conclusions are seemingly at odds with those of investors from around the world, both large and small. Capital markets essentially function to allocate capital. In making decisions about capital allocation and the premiums charged for such investments, investors make judgments about the quality of the regulator, the breadth and depth of disclosure, the efficacy of the enforcement regime and the fairness of the marketplace, among other things. Judging by the degree of global investment in the U.S. market and taking into account the cost of capital in the United States, it would appear that those whose money is at stake view the U.S. regulatory system in a different, more positive light—even in light of recent regulatory failings.

32. In sum, the U.S. authorities firmly believe that the overall ratings are not reflective of the U.S. system for the regulated marketplace. Nonetheless, the U.S. authorities will continue to evaluate and, as appropriate, enhance their regulatory programs. The CFTC and SEC look forward to a continuing dialogue with the IMF to advance our shared goal of strengthening financial regulation and enhancing supervision of the global financial services sector.

FINANCIAL SECTOR ASSESSMENT PROGRAM

UNITED STATES OF AMERICA

IAIS INSURANCE CORE PRINCIPLES

REPORT ON STANDARDS AND CODES (ROSC)

JULY 2010

INTERNATIONAL MONETARY FUND
MONETARY AND CAPITAL MARKETS DEPARTMENT

Contents Page

GLOSSARY

AIG	American International Group
AML/CFT	Anti-Money Laundering
FATF	Financial Action Task Force
FAWG	Financial Analysis Working Group
FSAP	Financial Sector Assessment Program
IAIS	International Association of Insurance Supervisors
ICP	Insurance Core Principle
MoU	Memorandum of Understanding
NAIC	National Association of Insurance Commissioners
SEC	Securities and Exchange Commission
TARP	Troubled Asset Relief Program

I. Introduction and Methodology

1. **Insurance regulation in the United States, which is mostly carried out by states, is generally thorough and effective, although there are areas where significant development is needed**. Strong regulation contributed to the overall resilience of the insurance sector during the financial crisis. There is generally a high level of observance of the Insurance Core Principles. Aspects of regulatory work such as data collection and analysis in relation to individual insurance companies are world-leading. There are mechanisms to ensure individual states implement solvency requirements effectively. However, there is a need for development of the policy framework in relation to insurance and financial stability and international issues; and for extensive reform to the laws governing state insurance departments, including on appointment and dismissal of commissioners, to secure the independence of regulatory work. The approach to supervision of groups needs significant development.

2. **The assessment of the U.S.'s compliance with International Association of Insurance Supervisors (IAIS) Insurance Core Principles (ICP)[1] was carried out as part of the 2010 U.S.A Financial Sector Assessment Program (FSAP).**[2] The assessment was carried out by Tom Karp, insurance expert and a former Executive General Manager, Australian Prudential Regulatory Authority, and Ian Tower, Monetary and Capital Markets Department, IMF.

3. **While insurance regulation is principally a responsibility of the states, the assessment addresses national compliance with the ICPs**. Regulatory responsibility is shared by 50 states, the District of Columbia and the five U.S. territories. Federal authorities have limited regulatory powers over the insurance sector. The FSAP assessment addresses insurance regulation nationally and does not assess individual state authorities.

4. **The assessment is based on information available in November 2009, the time of the FSAP mission**. It assesses compliance with the 2003 version of the IAIS Insurance Core Principles and Methodology. The National Association of Insurance Commissioners (NAIC) contributed a self-assessment and further material in response to requests before and during the mission. Documentation, including relevant laws, was supplied. The assessors met with staff from the NAIC and with selected insurance commissioners[3] and their staffs; with government, insurance companies and intermediaries; and with industry and actuarial bodies. The assessors are grateful for the full cooperation extended by all.

---

[1] The underlying Detailed Assessment Report was published in May 2010 and is available at http://www.imf.org/external/pubs/cat/longres.cfm?sk=23868.0.

[2] For further discussion see the accompanying Financial System Stability Assessment (FSSA).

[3] The term "insurance commissioner" is used to refer to the most senior official responsible for insurance regulation in each state, district, or territory. Actual titles vary.

5. **The approach to this assessment reflects the large market size and state-based system of insurance regulation**. Reliance has been placed on discussions with NAIC staff on regulatory practices across the states; and on the procedures used by the NAIC (i.e., the commissioners of insurance acting collectively and the staff of the association) in their support for state regulators; and with a selection of insurance commissioners and their staff in the states of Illinois, Iowa, New York, and West Virginia, focusing in particular on, respectively, life insurance supervision, the property and casualty sector (including brokers), coordination with foreign regulators, and challenges faced by smaller states. The assessors also met with the U.S. Department of the Treasury to discuss their overview of the system in the context of evolving plans for the reform of U.S. regulation. The assessors note that their conclusions are subject to unavoidable limitations on their ability to verify practices across the country that result from a state-based system with over 50 separate authorities.

II. Institutional and Market Structure—Overview

6. **The U.S. insurance market is the largest in the world**. There were 7,948 licensed insurance companies at the end of 2008. Total premium volume in 2008 of US$1.24 trillion accounted for 29 percent of the global market. On insurance density measures (premiums per capita), the United States ranked ninth at US$4,078 in 2008 and thirteenth on insurance penetration (premiums as a percentage of GDP) at 8.7 percent.[4] There are three main sectors—life, property and casualty, and health insurance. Key specialist insurance lines (i.e., those which must be written in separate companies) are: financial guaranty (bond insurance—the "monoline insurers"); mortgage insurance; and title insurance.

7. **Most U.S. insurers write primary insurance on U.S. risks**. The U.S. market is characterized by low market concentration in most sectors, indicating a high degree of competition; limited private sector capacity in certain "hard to insure" risks, such as natural catastrophes, which has led to the creation of programs provided by government; limited international insurance business and a relatively small reinsurance capacity—58 percent of all premium ceded to reinsurers by U.S. insurers is to markets in Europe and Bermuda; and relatively few groups offering insurance as well as other financial services: for example, only 17 groups are headed by a bank holding company and regulated by the Federal Reserve.

8. **Distribution of insurance products is mainly through agents and brokers**. Intermediaries distributing insurance in the United States are generally referred to as "producers." They may act as agents of one or more insurance companies (captive agents or independent agents) or as brokers—i.e., acting on behalf of the customer.

9. **Overall, the insurance sector, and property and casualty business in particular, has been resilient through the financial crisis**. Capital and surplus, the key measure of the buffer available in case reserves prove inadequate to ensure that policyholder claims can be paid, fell by 6.7 percent in life and 8.5 percent in property and casualty between end-2007 and mid-2009. Companies whose capital adequacy, measured by the regulators' risk-based

---

[4] All data from Swiss Re: World Insurance in 2008.

capital (RBC) requirements, fell to regulatory intervention levels accounted for only 3 percent of the total in 2008. The property and casualty sector suffered from investment falls, but losses from natural catastrophes in 2009 were not as high as in some recent years.

10. **However, there have also been significant stresses in the insurance sector in the last two years**. Writers of financial guaranty business (the monoline insurers) lost their high ratings after serious losses related to impair structured finance products. The American International Group (AIG) was supported by the federal authorities after major losses at its capital markets affiliate. Two other insurance groups with federally regulated banking or thrift subsidiaries were granted federal government capital support under the Troubled Asset Relief Program (TARP) (others had applied for funds). Life insurance was particularly affected by the crisis, many strains being related to growth in non-traditional savings products such as variable annuities, many of which have generous guarantees.

11. **While pressures have eased, there remain challenges**. While the recovery in many markets since March 2009 has brought relief, life companies in particular remain exposed to possible further problems if economic recovery continues to be modest. However, as life companies have shifted to savings products, their insurance risks (mortality and longevity) have become less significant. Health insurers are subject to significant uncertainty arising from the federal government reforms to health insurance. Property and casualty risks are more dispersed. While the United States is exposed to major natural catastrophes, their impact is regional; national companies are diversified and the largest risks are carried by foreign reinsurers.

12. **Insurance is a predominantly state-regulated activity in the United States**. The 1945 McCarran-Ferguson Act reinstated the regulatory authority of the states "on matters of the business of insurance" and exempted the "business of insurance" as regulated by the states from federal anti-trust laws. The federal government has enacted various measures affecting insurance, including the Gramm-Leach-Bliley Act of 1999 and the 2002 U.S.A. PATRIOT Act, which gave examination powers in relation to anti-money laundering and specified insurance business to federal authorities.

13. **States carry out insurance regulatory functions within the state administration**. The insurance departments or similar units within state administrations carry out licensing and oversight work for insurance companies and intermediaries under powers set out in state legislation and in accordance with state budgets. A commissioner heads the department and exercises all formal powers. Some commissioners are elected, but most are appointed by the state governor. While arrangements vary among states, funding is usually raised from the insurance markets via fees and levies. Insurance departments also collect premium taxes for the states, a significant part of state governments' total revenues.

14. **State insurance departments carry out both financial and market conduct regulation**. States set reserving and capital requirements. They carry out financial analysis and onsite examinations. Most states have some review or approval authority over policy forms and, in the case of property and casualty insurers, they also often regulate premium rates. Departments also respond directly to consumers' complaints and requests for information. They license and oversee insurance intermediaries.

15. **The NAIC plays an important coordinating role for state regulators**. The NAIC is a not-for-profit organization established by the state insurance commissioners to centralize some functions to achieve economies and greater uniformity. The NAIC itself employs some 430 staff, which compares with nearly 12,000 employed by the states. Key functions of the NAIC include the development of model laws and regulations, which now total over 200; the Financial Regulation Standards and Accreditation Program (referred to in this report as "the accreditation program"), aimed at ensuring that states meet certain minimum standards in respect to financial regulation; and the centralized process of financial analysis operated through the NAIC's Financial Analysis Working Group (FAWG).

16. **Insurance policyholders are protected against the insolvency of insurance companies by guaranty associations in each state**. All U.S. insurance companies are required to be members of associations covering life and health insurance and, through separate organizations, property and casualty. Payments are triggered by the insolvency of an insurer. Laws differ on the extent of coverage and maximum payable per policyholder.

III. Main Findings

17. **Insurance regulation in the United States is generally thorough and effective, although there are areas where development is needed**:

- The preconditions for effective insurance supervision are generally met; but there is a need for development of the framework in relation to insurance and financial stability and international issues. There is a need for reform of the laws governing state insurance departments, including on appointment and dismissal of commissioners, the budgetary framework and remuneration policies, in order to secure the independence of regulatory work. While regulation is carried out transparently, there is a need for measures to foster improved stakeholder understanding of the regulatory approach.

- There is a comprehensive set of requirements and processes for insurance company licensing, but some gaps in the requirements relating to suitability of persons. Requirements in relation to governance, internal controls, and risk management are limited and should be extended.

- NAIC data collection and analysis capabilities are world-leading, although the absence of complete group-wide consolidated data for groups hinders the ability of supervisors to analyze and monitor important market-wide events.

- Examinations (i.e., onsite supervision) are generally thorough and well documented. The approach to enforcement is comprehensive and applied in practice as necessary; there is no explicit authority for supervisors to fine directors or senior managers of insurers, or to bar them from acting in responsible capacities in the future.

- The approach to supervision of groups needs significant development. Supervisors do not currently make a comprehensive and consistent assessment of the financial condition of the whole group of which a licensed insurance company is a member.

- The liability reserving methods and bases generally lead to conservative estimates and, in combination with capital requirements, provide a sizable buffer against adverse experience. However, for general transparency and for international comparison, consideration should be given to specifying a target safety level for reserving and an associated target safety level for capital.

- While producer (i.e., intermediary) regulation is less uniform than for insurance companies, states have the core requirements. There is a need to extend broker trust fund arrangements across states, to develop a uniform approach to the regulation of major brokers and to finalize a consistent approach to commission disclosure.

- Consumer protection work is moving to a more proactive approach. This transition has further to go. However, core consumer protection requirements are apparently in place in most states.

- Requirements on fraud are in place across states, and the capacity of departments to address fraud-related issues is increasing as market conduct exams are undertaken and the availability of fraud data increases. The authorities have only recently brought relevant insurance business within the scope of federal anti-money laundering regulatory requirements. There were significant gaps in the framework when the most recent Financial Action Task Force (FATF) work was undertaken in 2006.

Table 1. Summary of Observance of the Insurance Core Principles

INSURANCE CORE PRINCIPLE	ASSESSMENT
ICP 1– Conditions for effective insurance supervision	The preconditions for effective insurance supervision are generally met—reflecting the highly developed legal and institutional framework within which it operates and the scale and liquidity of U.S. financial markets. But there is a need for some development of the policy framework in relation to insurance and financial stability and to international issues.
ICP 2 – Supervisory objectives	The objectives of departments are generally not established explicitly by law. There are differences in the ways individual departments view their objectives. There is also some scope for conflict of objectives. There is a need to balance objectives of achieving financial safety and soundness and consumer protection with the desirability of fostering market efficiency and competitiveness.
ICP 3 – Supervisory authority	The vesting of regulatory powers in the commissioner in principle ensures that departments are operationally independent. However, the ability of the governor in most states to dismiss commissioners at any time, and without a public statement of reasons, exposes departments to potential political influences. Elected commissioners may be subject to the pressures of the electoral cycle. In addition, departments are dependent on state legislatures in respect of principal legislation and for budgetary resources.
ICP 4 – Supervisory process	Insurance regulation is carried out openly and transparently, with clear accountability to the state administration and legislature and rights of appeal (and judicial review). But there is a need for measures to foster improved stakeholder understanding of the state-based regulatory approach.

ICP 5 – Supervisory cooperation and information sharing	Although the main focus of information exchange with other regulators has traditionally been on cooperation with other insurance departments, regulators are able to share information with relevant federal authorities and with regulators abroad. There is a need to continue developing the network of MoUs.
ICP 6 – Licensing	While approaches in individual departments vary, the core requirements adopted by all states represent a comprehensive set of requirements and processes for insurance company licensing.
ICP 7 – Suitability of persons	Departments take a view on all significant owners, Board members, senior management, auditors, and actuaries and take appropriate action where concerns arise. However, the approach is based on assessment of the fitness and propriety of key functionaries at the point of application for a license, and on an ongoing basis through the examination process, rather than the approval of individuals.
ICP 8 – Changes in control and portfolio transfers	There are extensive requirements and related reporting governing changes in control and portfolio transfers.
ICP 9 – Corporate governance	Corporate governance standards for publicly-traded U.S. companies, including insurers, are set and enforced by the Securities and Exchange Commission (SEC), while requirements for all insurance companies will be introduced from January 2010. Departments have been increasing their focus on governance issues.
ICP 10 – Internal controls	Other than controls relating to financial reporting, departments have few requirements relating to internal controls on insurers. For publicly-traded companies, the Sarbanes-Oxley provisions provide a general framework of detailed control requirements and testing of controls. From January 1, 2010, much of this framework will be extended to most other insurers but these requirements will take time to implement in full.
ICP 11 – Market analysis	The absence of complete group-wide consolidated data for insurance groups and broader financial conglomerates hinders the ability of supervisors to analyze and monitor market-wide events of importance for the stability of insurance markets. Otherwise, the NAIC data sources and analysis capabilities are world-leading.
ICP 12 – Reporting to supervisors and off-site monitoring	The NAIC data collection and analysis capabilities in relation to authorized insurance companies are world-leading. The affiliate transaction requirements provide a strong means of identifying and controlling intra-group dealings and exposures. However, there are no formal reporting requirements for complete group-wide consolidated data for insurance groups and broader financial conglomerate groups which would allow insurance regulatory style financial condition assessment.
ICP 13 – On-site inspection	Financial examinations are generally thorough and well documented. Examinations also appear to identify the important issues. The rollout of a risk-focused examination approach will require examiners to make more qualitative judgments about insurer risks and controls. Effective implementation will not be easy because of the changes it demands of examiners.
ICP 14 – Preventive and corrective measures	The structure of prompt corrective action triggers and required actions is thorough and is rigorously applied. While it could not, and should not, prevent insurers ever failing, it does lead to reduced insurer shortfall in any failure.
ICP 15 – Enforcement or sanctions	There is no clear authority for the supervisory authority to fine directors or senior managers of insurers or to bar them from acting in responsible capacities in future.
ICP 16 –Winding-up or exit from the market	There is a strong focus by the supervisors on ensuring individual policyholder obligations are met. The arrangements for insurer wind-up and exit from the market are clear, have worked effectively and in conjunction with guaranty fund arrangements provide strong protection against policyholder loss if an insurer fails.
ICP 17 – Group-wide supervision	The U.S. approach is focused on securing the financial soundness of individual insurance companies. U.S. supervisors do not currently make an assessment of the financial condition of the whole group of which a licensed insurance company is a member. Risk-focused examinations are not yet generally focusing on group issues; and supervisory colleges are not meeting for all U.S.-based international groups.
ICP 18 – Risk	While the desired outcomes for this ICP are essentially achieved in practice owing to

assessment and management	comprehensive examination of insurers, it is increasingly important that the risk management function of insurers is of high quality and given significant focus and influence within insurers. There is no requirement that an insurer have in place comprehensive risk management policies and systems.
ICP 19 – Insurance activity	The relevant laws or regulations do not explicitly provide that an insurer must have in place strategic underwriting and pricing policies approved and reviewed regularly by the Board. Boards are not required to set the strategic limits on these core insurance functions within which management should operate.
ICP 20 – Liabilities	The liability reserving methods and bases generally lead to conservative estimates, which is in line with the conservative, book value nature of statutory insurance accounting in the United States. However, there is currently no particular or specified safety level which is targeted for reserving – or capital.
ICP 21 – Investments	The regulatory requirements for investments are robust and likely to have contributed to the limited number of major investment problems for insurers in the financial crisis. As insurers move to a more principles-based approach, it will be important to ensure that all aspects of investment risk, especially asset/liability mismatching risks, are well covered in the reserving and capital requirements.
ICP 22 – Derivatives and similar commitments	The requirements relating to derivatives use in insurers are robust and sensible in that they allow derivatives to be used for purposes which would enhance an insurer's investment management and returns without exposing it to undue risk.
ICP 23 –Capital adequacy and solvency	There are no requirements to address inflation of capital through multiple gearing. Insurance company reserves are determined conservatively and the regulatory capital is then required in addition. The combination of reserving and capital provides a sizable buffer against adverse experience. In the absence of a specified safety level which is targeted for reserving plus capital, it is difficult to determine the level of adversity that the combination of reserves and capital can cover, but it appears to be commensurate with or higher than in many other jurisdictions.
ICP 24 – Intermediaries	While producer (i.e., intermediary) regulation is much less uniform than it is for insurance companies, most states have at least the core requirements. The general legal framework provides safeguards for client money where intermediaries act as agents. There is less uniformity on the safeguards applying to money held by brokers.
ICP 25 – Consumer protection	Departments have been moving to a more proactive approach to market conduct of insurers. This transition has further to go, however, particularly in respect of the ability of the departments to identify and respond quickly to wider market issues as well as problems at individual companies. As with producer licensing, there is a marked lack of uniformity across states in the market conduct area. However, core consumer protection requirements are apparently in place in most states.
ICP 26 – Information, disclosure and transparency toward markets	While there are no regulatory requirements in relation to disclosure, full financial information, including the actuarial opinion and auditor's statement, are readily available to stakeholders. This reflects the relative ease of access and concentration of data that has resulted from financial statements being submitted directly to the NAIC. However, there is scope to improve the availability of information to policyholders without access to databases, ratings, etc.
ICP 27 – Fraud	While approaches vary by state, core requirements (such as making insurance fraud a crime) are in place across states. The capacity of departments to address fraud-related issues is increasing as market conduct exams are undertaken.
ICP 28 –Anti-money-laundering, combating the financing of terrorism	The authorities have only recently brought relevant insurance business within the scope of (federal) anti-money laundering regulatory requirements. Implementing the approach has taken time. There were significant gaps in the framework when the most recent FATF work was undertaken in 2006. The effectiveness of cooperation between state and federal regulators is limited pending the consideration of legal issues arising from their collaboration and agreement of new procedures and information sharing arrangements.

Table 2. Recommended Action to Improve Observance of the Insurance Core Principles

PRINCIPLE	RECOMMENDED ACTION
ICP 1 – Conditions for effective insurance supervision	The authorities should increase information-sharing and coordination between state regulators and federal authorities, agree policies and procedures for the regulation of systemically important institutions, markets and instruments in the insurance sector and make new arrangements to increase the authority of federal authorities in relation to the implementation of international agreements.
ICP 2 – Supervisory objectives	Insurance departments, the NAIC and state legislatures should develop a clear, joint statement of the objectives of insurance regulation, taking into account good practice internationally, and align the objectives of individual state departments with these objectives.
ICP 3 – Supervisory authority	The NAIC and state legislatures should make reforms including providing for fixed terms to be standard for commissioner appointments, with dismissal mid-term to be possible only for prescribed causes and with publication of reasons; and making departments fully self-funding.
ICP 4 – Supervisory process	To further improve the transparency of its work, the NAIC should make publicly available some information that is currently available only on payment of a fee or by subscription; and publish summary information on their assessment of states' compliance with accreditation standards.
ICP 5 – Supervisory cooperation and information sharing	The states and NAIC should continue to develop the network of MoUs. All state insurance departments should ensure that laws are updated to enable them to protect information received from foreign regulators. This will ensure that overseas regulators are not deterred from sharing information freely.
ICP 7 – Suitability of persons	Specific requirements in relation to individuals' fitness and propriety should be adopted. Gaps in the requirements of departments should be filled.
ICP 9 – Corporate Governance	As examiners gain experience, the NAIC and/or departments should consider issuing more guidance on good and bad practices in corporate governance for insurers.
ICP 10 – Internal controls	As examiners gain experience, the NAIC and/or departments should consider the scope for issuing guidance on good and bad practices in internal control. They should also make it a formal requirement for insurers to have an internal audit function.
ICP 11 – Market analysis	Regulators should collect more complete group-wide consolidated data for insurance groups and broader financial conglomerates. They should develop further their analysis of developments outside the U.S. markets.
ICP 12 – Reporting to supervisors and off-site monitoring	Collection of group-wide consolidated data for insurance groups and broader financial conglomerate groups should be introduced.
ICP 15 – Enforcement or sanctions	The insurance laws should be changed to provide the supervisory authority with powers to fine individual directors and senior managers of insurers, and to bar them from acting in responsible capacities in the future.
ICP 17 –Group-wide supervision	U.S. supervisors should include fuller assessment of the financial condition of the whole group of which a licensed insurance company is a member, extend the risk-focused approach to examinations of solo insurance companies to groups and ensure that colleges of supervisors for the U.S. groups with major international operations are established and functioning effectively—and led by U.S. regulators with appropriate insurance expertise.

PRINCIPLE	RECOMMENDED ACTION
ICP 18 –Risk assessment and management	The relevant laws, regulations or standards should be changed to include a requirement that an insurer must have in place comprehensive risk management policies and systems capable of promptly identifying, measuring, assessing, reporting and controlling their risks.
ICP 19 – Insurance activity	The relevant laws or regulation should explicitly provide that an insurer must have in place strategic underwriting and pricing policies approved and reviewed regularly by the Board.
ICP 23 – Capital adequacy and solvency	For general transparency and for comparison, it is recommended that consideration be given to specifying a target safety level for reserving and an associated target safety level for capital. Requirements to address inflation of capital through multiple gearing should be included in the law, regulation or rules.
ICP 24 – Intermediaries	Some strengthening of the approach to producer regulation is recommended to extend broker trust fund arrangements across states (where not already in place), to develop a uniform approach to the regulation of major brokers and to complete the current work on a consistent approach to the regulation of commission disclosure.
ICP 28 - Anti-money-laundering, combating the financing of terrorism	It is recommended that a timetable is set for the agreement and implementation of new arrangements between state insurance departments and federal authorities that will deliver greater resourcing of supervisory activities as well as necessary information exchange.

IV. AUTHORITIES' RESPONSE

18. The U.S. authorities welcomed the opportunity to take part in the U.S. FSAP and the IMF's assessment of a high level of observance of the IAIS Insurance Core Principles (ICPs). It has provided insurance regulators in the United States with a timely opportunity to undertake a comprehensive self-assessment of the U.S. insurance regulatory system against international standards, and has contributed to ongoing internal reviews and assessments of regulatory practices. In addition, the FSAP has served as a useful platform for providing an overview of the U.S. insurance regulatory system and its multi-jurisdictional structure. The authorities appreciate the recognition by the IMF of the strengths in the regulatory system including areas that the IMF itself has coined as "world leading."

19. As recognized by the Report, it is important to consider the U.S. assessment in context. The assessment of the U.S. supervisory framework was undertaken in the wake of a severe financial crisis, and movements toward significant changes in supervisory practices have gained momentum as a result of the financial crisis and circumstances emanating from the crisis, including with respect to group-wide supervision. The IMF's assessment of U.S. compliance with ICP 17, the group-wide supervision standard, goes beyond the scope of the current ICP assessment in that it assesses compliance with a group supervision structure, which is still under discussion and development in most jurisdictions and within the IAIS, where revision of the insurance ICPs that may reflect these changes may not be finalized until 2011.

20. Insurance regulators in the United States are working with regulators around the world on initiatives to enhance group supervision, and have in place inter-regulatory

cooperation processes, such as the use of lead state supervisory structures and the Financial Analysis Working Group of the National Association of Insurance Commissioners (NAIC). In addition, the Report acknowledges the comprehensive review underway with the Solvency Modernization Initiative which takes into account international and cross-sectoral practices in the analysis of possible additions or modifications to current insurance regulatory practices.

21. U.S. authorities remain strongly committed to prudential regulatory independence and accountability, including continually striving to improve ways to effectively balance these two objectives. Transparent rulemaking with opportunity for stakeholder involvement, for example, has proven a particularly effective way to provide accountability and improve the regulatory environment, while respecting regulatory independence. As reflected in the assessment of ICP 3, the Supervisory Authority standard, the assessment appears to rely on structural characteristics while failing to fully recognize the effective operational independence of state insurance regulators. In practice, the U.S. multijurisdictional approach to insurance regulation holds regulators accountable to each other in a peer review process that includes on-going nation-wide monitoring through the NAIC, regular dialogue among all regulators, and the ability of states to question the actions of fellow state insurance regulators.

22. Within the assessment, there appear to be philosophical preferences for a principles-based, rather than rules-based, approach to regulation, yet assessment recommendations inconsistently apply those preferences by variously seeking more, as well as fewer, rules. Further, there appears to be no empirical evidence to suggest that one approach is superior to the other or that the choice of approach affects the U.S. regulators' ability to meet the standards set out in the various ICPs. U.S. authorities fully support a regulatory environment based on principles and made operational by rules that can provide consistent standards throughout the marketplace, yet remain flexible enough to adapt to new developments.

23. The IMF's assessment of ICP 28, the AML and CFT standard, identified some areas where U.S. AML requirements may be improved upon, but fails to fully recognize the robust protection provided U.S. citizens against money laundering activities. Of note, the United States has a bifurcated regulatory scheme regarding AML regulation. As noted, the federal government has primary jurisdiction of AML statutes while the regulation of insurance and expertise in financial examination of insurance is the responsibility of the states. Although both state and federal authorities have agreed to work together to review the current examination process, it is important to note and remember that an in-depth legal analysis has yet to be undertaken on this subject.

24. U.S. Authorities appreciate the assessment and will thoroughly review the Report's recommendations and take them into account when initiating and implementing any insurance regulatory reforms. We look forward to engaging in continuing ongoing dialogues with the IMF on how to best collectively improve international financial stability and supervision of the global financial services sector.

FINANCIAL SECTOR ASSESSMENT PROGRAM

UNITED STATES OF AMERICA

THE FIXED INCOME CLEARING CORPORATION–GOVERNMENT SECURITIES DIVISION OBSERVANCE OF THE CPSS/IOSCO RECOMMENDATIONS FOR CENTRAL COUNTERPARTIES

REPORT ON STANDARDS AND CODES (ROSC)

JULY 2010

INTERNATIONAL MONETARY FUND
MONETARY AND CAPITAL MARKETS DEPARTMENT

Contents Page

GLOSSARY

CCP	Central Counterparty
CFTC	Commodity Futures Trading Commission
CME	Chicago Mercantile Exchange
CPSS	Committee on Payment and Settlement Systems
DTC	Depository Trust Company
DTCC	Depository Trust and Clearing Corporation
FICC-GSD	Fixed Income Clearing Corporation – Government Securities Division
FICC-MSBD	Fixed Income Clearing Corporation – Mortgage Backed Securities Division
FSS	Fedwire Securities Service
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commission
NSCC	National Securities Clearing Corporation
RCCP	Recommendation for Central Counterparties
RSSS	Recommendation for Securities Settlement Systems
SEC	Securities and Exchange Commission
SSS	Securities Settlement System

I. Introduction and Methodology

1. The Fixed Income Clearing Corporation–Government Securities Division (FICC-GSD) observes the majority of the recommendations and broadly observes the others of the CPSS-IOSCO Recommendations for central counterparties (RCCPs).[1] The system properly addresses risks related to clearing, custody, financial resources, operations, and links. Some measures to improve resilience against financial risks, governance arrangements, and transparency have been identified. It is, however, important that FICC-GSD effectively takes additional steps to properly address financial risks. It would also be beneficial that the Securities and Exchange Commission (SEC) requires FICC-GSD compliance with RCCPs, and the Federal Reserve is provided with a legal mandate to oversee FICC, as a complementary function to the existing SEC regulation and supervision.

2. The assessment of FICC-GSD was undertaken in the context of the IMF Financial Sector Assessment Program (FSAP). This assessment only covers FICC-GSD, i.e. the CCP providing services for transactions in U.S. Government Treasury and Agency securities. The FICC Mortgage Backed Securities Division (MBSD), which is not yet providing CCP services, is not covered by this FSAP mission.

3. Prior to the mission, FICC-GSD conducted a self-assessment following the RCCPs methodology published by the CPSS-IOSCO in 2004. The assessment also benefited from discussions with the SEC, the Federal Reserve Board and Federal Reserve Bank of New York representatives, as well as the operator of FICC and some major participants in the system.[2] Relevant authorities and the operator of the system have been very co-operative in providing additional confidential information and organizing additional meetings, when required.

4. Given the organization of the Depository Trust & Clearing Corporation (DTCC), the assessment of the three entities belonging to the group i.e. the Depository Trust Company (DTC), the National Securities Clearing Corporation (NSCC) and the Fixed Income Clearing Corporation (FICC) resulted in almost identical recommendations on legal risk (RSSS1 and CCP1), operational risk (RSSS11 and RCCP8) governance (RSSS13 and RCCP13), efficiency (RSSS15 and RCCP14) and links (RSSS19 and RCCP11).

II. Institutional and Market Structure—Overview

5. The FICC-GSD, wholly-owned subsidiary of DTCC, is a systemically important CCP for transactions in U.S. Government Treasury and Agency Securities. It was established in 2003 from the merger between the Government Securities Clearing Corporation and the Mortgage Backed Securities Clearing Corporation. Its predecessors were established in 1986 to provide automated trade comparison and settlement services, risk management and

---

[1] The underlying Detailed Assessment Report was published in May 2010 and is available at http://www.imf.org/external/pubs/cat/longres.cfm?sk=23872.0.

[2] This assessment was carried out by Daniela Russo (external expert) and overseen by Elias Kazarian (IMF).

operational efficiency to the U.S. Government securities market. Key figures of FICC's activities are provided in Table 1.

Table 1. Key Statistics of FICC-GSD, 2007–09

	2007	2008	2009
1. Number of contracts and transactions cleared (millions)	30.4	34.4	28.7
2. Value of contracts and transaction cleared (USD billions)	1,006,100	1,014,500	905,100
3. Average daily value of transactions (USD billions)	4	4	3,6
4. Peak value of transactions (USD trillions)	5.9	7.0	5.8
5. Total number of clearing members, of which:	103	97	98
5.1. Foreign clearing members	11	11	13
6.Clearing fund (USD millions) 1/	13,701.7	18,896.8	14,141.4

Source: DTCC.
1/ Includes the value of cash and securities.

6. FICC-GSD is a registered as a clearing agency and regulated and supervised by the SEC (section 17A of the Securities and Exchange Act). Although the SEC has not formally required FICC-GSD to perform a self-assessment with respect to the RCCPs, compliance with SEC rules assures compliance with most of the recommendations. FICC-GSD, as an affiliate of DTCC, is also subject to the oversight of the Federal Reserve.

III. Main Findings

Legal Framework (Rec. 1)

7. FICC's activities are governed by a consistent set of laws, regulations, and contractual arrangements that form a sound legal foundation for clearing, settlement, and custody activities. This information is publically available and readily accessible to system participants.

Participation requirements (Rec. 2)

8. The FICC-GSD's access and exit criteria are publicly disclosed. FICC-GSD requirements for participants' financial resources and credit worthiness are based on the legal nature of the participating entities as well as the services used. FICC-GSD also assesses the participants' operational reliability.

Financial risk management (Rec. 3-6)

9. FICC-GSD daily measures its exposures to participants and requires payment of contributions to the clearing fund. It can, when deemed appropriate, conduct intraday calls for additional clearing funds. FICC-GSD members' positions are monitored by DTCC risk management system. FICC mitigates its credit exposures on the basis of the clearing fund requirements, as well as cross-guarantee and cross-margining arrangements. The clearing fund is composed of cash and securities. In case of insufficient cash resources, FICC-GSD seeks to liquidate the available collateral via repo arrangements, although they are not committed facilities, and there is no certainty that they would be available in extreme but plausible scenario. The U.S. legal framework ensures the legal enforceability of FICC-GSD's collateral arrangements.

Custody and investment risks (Rec. 7)

10. FICC-GSD's securities and cash of the clearing fund are held in dedicated accounts with the two major clearing banks. Cash investments are authorized under a policy, approved by DTC's Audit Committee, which establishes principles for minimizing the risk of losses stemming from unsecured investments. The Audit Committee policy also establishes credit limits by counterparties to ensure that investments do not exceed a certain level of concentration.

Operational risk (Rec. 8)

11. FICC-GSD business continuity arrangements are developed at the level of DTCC holding company, including all sites, networks control centers and back-up sites as a unified complex. These arrangements are based on the authorities' requirements. DTCC has in place adequate procedures to identify and minimize the sources of operational risk that may arise in the clearing and settlement process. Contingency plans and back-up facilities are regularly tested and maintained to ensure the resilience of FICC-GSD.

Money settlements (Rec. 9)

12. For its end-of-day funds settlement, FICC-GSD uses central bank money with a tiered settlement arrangement relying on DTC as settlement agent. The end of day money settlement occurs via the settlement banks at the Federal Reserve's National Settlement Service (NSS).

Physical deliveries (Rec. 10)

13. The FICC-GSD's rules clearly set forth its obligations with respect to securities deliveries. In order to protect itself from principal risk, FICC–GSD continuously monitors participants' exposures and collects margin against failed items.

Risks in links between CCPs (Rec. 11)

14. FICC-GSD has set up a cross-margining arrangement with the Chicago Mercantile Exchange (CME) so that eligible positions at the CME are offset against eligible positions at FICC-GSD. For the purpose of this arrangement, a cooperative framework between the Commodity Futures and Exchange Commission (CFTC), overseeing the CME, and the SEC, overseeing the FICC-GSD is in place.

Efficiency (Rec. 12)

15. FICC-GSD regularly reviews its pricing levels, which are cost-based. The cost allocation methodology is part of a regular review by both internal and external auditors. FICC-GSD also conducts benchmark studies to assess cost effectiveness in the market. DTCC ensured that each service of the DTCC group does not cross-subsidise the cost and expenses of the others and that the risk management financial resources are not commingled.

Governance (Rec. 13)

16. There is a single governance structure for all DTCC subsidiaries, including FICC-GSD. Although DTCC's governance arrangements are made public, not all the relevant information is publicly available. DTCC is currently in the process of reviewing its governance arrangements. Public interest is taken into account in a number of ways, including the requirement that all proposed

rule changes of NSCC be filed with the SEC and noticed for public comment, and by discussion with industry participants.

Transparency (Rec. 14)

17. Market participants are provided with sufficient information regarding FICC-GSD risk management. The regulations, rules, and procedures governing FICC-GSD are publicly available, as are annual audited financial statements, and participants receive non audited quarterly financial statements. The FICC-GSD has completed and published on its website a self-assessment following the RCCPs assessment methodology.

Regulation and oversight (Rec. 15)

18. The responsibilities and objectives of relevant public authorities with regard to securities clearing and settlement systems are clearly defined and publicly disclosed. The SEC supervises FICC-GSD given its status of registered clearing agency. In conducting its oversight responsibilities, the SEC applies other standards than the RCCPs, although some of the issues covered in the RCCPs are also addressed by the standards under the securities laws that are applied by the SEC. As an affiliate of DTC, the Federal Reserve has the legal power to examine FICC. The SEC and the Federal Reserve have signed exam-specific information sharing arrangements regarding the oversight of FICC-GSD.

Table 2. Summary of Observance with the CPSS-IOSCO Recommendations

Responsibility	Assessment
Legal risk	
1. A CCP should have a well founded, transparent, and enforceable legal framework for each aspect of its activities in all relevant jurisdictions.	FICC-GSD's activities are governed by a consistent and transparent set of laws, regulations, and contractual arrangements that form a sound legal basis.
Participation requirement	
2. A CCP should require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the CCP. A CCP should have procedures in place to monitor that participation requirements are met on an ongoing basis. A CCP's participation requirements should be objective, publicly disclosed, and permit fair and open access.	FICC submitted a rule filing to SEC for expanding its membership to include some buy-side unregistered investment pools (UIP), such as hedge funds, as a new membership category. In its filing to the SEC, FICC stated it will impose additional risk management measures with respect to UIP members, including calculating their Clearing Fund requirements at a higher value at risk confidence level and instituting an additional qualitative assessment requirement.
Measurement and management of credit exposures	
3. A CCP should measure its credit exposures to its participants at least once a day. Through margin requirements, other risk control mechanisms or a combination of both, a CCP should limit its exposure to potential losses from defaults of its participants in	The definition of margins and clearing funds in the published assessment should be made more consistent in line with international usage/practice and the definitions provided in the glossary of the RCCP.

Responsibility	Assessment
normal market conditions so that the operations of the CCP would not be disrupted and non-defaulting participants would not be exposed to losses that they cannot anticipate or control.	
Margin requirements	
4. If a CCP relies on margin requirements to limit its credit exposures to participants, those requirements should be sufficient to cover potential exposures in normal market conditions. The models and parameters used in setting margin requirements should be risk-based and reviewed regularly.	FICC-GSD relies on margin requirements to collect contributions to the clearing fund to cover its exposure vis-à-vis its members. The clearing fund is composed of deposits from the members either in cash or in certain securities. FICC-GSD tests regularly the risk-based margin requirements.
Financial resources	
5. A CCP should maintain sufficient financial resources to withstand, at a minimum, a default by the participant to which it has the largest exposure in extreme but plausible market conditions.	FICC-GSD's liquidity need is highly concentrated to the two major clearing banks. FICC-GSD's liquidity can be increased by repoing the securities in the clearing fund. However, this arrangement cannot be considered as a committed line, since there is no complete assurance that the repo markets would be effective in extreme market situations.
Default procedures	
6. A CCP's default procedures should be clearly stated, and they should ensure that the CCP can take timely action to contain losses and liquidity pressures and to continue meeting its obligations. Key aspects of the default procedures should be publicly available.	FICC-GSD's default procedures are clearly stated in the system's rules and procedures, which would allow FICC-GSD to suspend or terminate a member from any service, should it become subject to insolvency proceedings or fail to perform its obligations to the system. The U.S. legal framework provides a high degree of assurance with regard to the enforceability of default procedures.
Custody and investment risk	
7. A CCP should hold assets in a manner whereby risk of loss or of delay in its access to them is minimized. Assets invested by a CCP should be held in instruments with minimal credit, market, and liquidity risks.	FICC-GSD's assets are highly concentrated to the two major clearing banks, and not all FICC-GSD investments are secured.
Operational risk	
8. A CCP should identify sources of operational risk and minimize them through the development of appropriate systems, controls, and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. Business continuity plans should allow for timely recovery of operations and fulfillment of a CCP's obligations.	Contingency plans and backup facilities for the failure of key systems are not tested and reviewed with participants (only connectivity is tested with the critical participants).

Responsibility	Assessment
Money settlements	
9. A CCP should employ money settlement arrangements that eliminate or strictly limit its settlement bank risks, that is, its credit and liquidity risks from the use of banks to effect money settlements with its participants. Funds transfers to a CCP should be final when effected.	FICC-GSD uses the central bank model with a tiered settlement arrangement relying on DTC as settlement agent, for its end-of-day funds settlement.
Physical deliveries	
10. A CCP should clearly state its obligations with respect to physical deliveries. The risks from these obligations should be identified and managed.	FICC-GSD does not have direct access to Fedwire Securities and Fedwire Funds services. Such access would allow FICC-GSD to settle DVP in central bank money and reduce the settlement concentration to the two clearing banks.
Risks in links between CCPs	
11. CCPs that establish links either cross-border or domestically to clear trades should evaluate the potential sources of risks that can arise, and ensure that the risks are managed prudently on an ongoing basis. There should be a framework for cooperation and coordination between the relevant regulators and overseers.	FICC-GSD has appropriate risk management procedures in place to identify and evaluate the risks from the links, and there is a supervisory coordination between CFTC and SEC for the links to CME.
Efficiency	
12. While maintaining safe and secure operations, CCPs should be cost-effective in meeting the requirements of participants.	FICC-GSD regularly reviews its pricing levels, which are cost-based. It also conducts benchmark studies to assess cost effectiveness in the market.
Governance	
13. Governance arrangements for a CCP should be clear and transparent to fulfill public interest requirements and to support the objectives of owners and participants. In particular, they should promote the effectiveness of a CCP's risk management procedures.	FICC-GSD's governance arrangements are not sufficiently specified and transparent, including criteria for the composition and selection of Board members.
Transparency	
14. A CCP should provide market participants with sufficient information for them to identify and evaluate accurately the risks and costs associated with using its services.	The regulations, rules, and procedures governing FICC-GSD are publicly available, as are audited annual financial statements, and participants receive non audited quarterly financial statements.
Regulation and oversight	
15. A CCP should be subject to transparent and effective regulation and oversight. In both a domestic and an international context, central banks and securities regulators should cooperate with each other and with other relevant authorities.	The SEC has not formally required FICC-GSD to perform a self-assessment based on the RCCPs, but compliance with SEC rules ensures compliance with most of the recommendations.

Table 3. Actions to Improve Compliance

Reference Recommendation	***Recommended Action***
Recommendation 3: Credit exposures management	Align the definitions of margins and clearing funds with international standards.
Recommendation 5: Financial resources	Consider an additional liquidity buffer to deal with extreme situations where repo arrangements cannot be used. Minimize FICC-GSD's exposure and concentration risk vis-à-vis the two clearing banks. Consider conducting more frequent stress testing than once a month, in particular, in times of unusual market volatility. Disclose stress testing assumptions to participants.
Recommendation 7: Custody and investment risk	Continue to monitor and mitigate the potential risks, which result from holding assets at only two commercial banks. Avoid unsecured investments to the largest extent possible.
Recommendation 8: Operational risk	Test and review FICC-GSD backup sites to critical participants' backup sites.
Recommendations 10: Physical deliveries	Provide FICC-GSD direct access to Fedwire Securities and Fedwire Funds services to settle DVP transactions in central bank money.
Recommendation 13: Governance	FICC-GSD's governance arrangements should be more clearly specified and transparent, including criteria for the composition and selection of Board members.
Recommendation 15: Regulation and oversight	SEC should formally require FICC-GSD to perform a self-assessment based on the RCCPs. Ensure the compliance of the SEC rules with the RCCPs. Provide legal mandate to the Federal Reserve to oversee FICC-GSD, which is systemically important system, as a complementary function to the SEC regulation and supervision.

IV. Authorities' Response to the Assessment

19. The U.S. authorities welcome the IMF's assessment of the FICC-GSD against the RCCPs. We appreciate the significant undertaking associated with an FSAP review of the biggest financial sector in the world, as well as the challenges that accompany the first assessment of a large advanced country in the wake of the crisis. The authorities are pleased to note that the IMF's assessment reflects the high degree of compliance of FICC-GSD with the RCCPs, and will work with FICC-GSD in considering the assessment's specific comments and recommendations. Again, the authorities appreciate the significant undertaking associated with the assessment of FICC-GSD and the contribution that the assessment process makes to the stability and effective regulation and oversight of systemically-important payment, clearing and settlement systems.

FINANCIAL SECTOR ASSESSMENT PROGRAM

UNITED STATES OF AMERICA

THE DEPOSITORY TRUST COMPANY'S OBSERVANCE OF THE CPSS-IOSCO RECOMMENDATIONS FOR SECURITIES SETTLEMENT SYSTEMS

REPORT ON STANDARDS AND CODES (ROSC)

JULY 2010

INTERNATIONAL MONETARY FUND
MONETARY AND CAPITAL MARKETS DEPARTMENT

Contents Page

GLOSSARY

CCP	Central Counterparty
CPSS	Committee on Payment and Settlement Systems
CSD	Central Securities Depository
DTC	Depository Trust Company
DTCC	Depository Trust and Clearing Corporation
DVP	Delivery-versus-Payment
FOP	Free of Payment
FSS	Fedwire Securities Service
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commission
ISO	International Organisation for Standardisation
NSCC	National Securities Clearing Corporation
NSS	National Settlement Service
NYSBD	New York State Banking Department
NYSE	New York Stock Exchange
RCCP	Recommendation for Central Counterparties
RSSS	Recommendation for Securities Settlement Systems
SEC	Securities and Exchange Commission
SWIFT	Society for Worldwide Interbank Financial Telecommunication

I. Introduction and Methodology

1. The assessment of the Depository Trust Company (DTC) against the CPSS-IOSCO Recommendations for Securities Settlement Systems (RSSSs)[1] reveals that the system observes the recommendations, although some enhancements would allow DTC to increase its compliance level with all the recommendations. More precisely, actions need to be undertaken to improve its risk resilience by strengthening the stress testing, DTC's financial and liquidity resources, in particular, to address the problem that could arise when money market does not work smoothly and equities repo cannot be used to raise equities or cash. Additional improvements would be to enhance governance arrangements, develop procedure for intraday finality for cash settlement.

2. The assessment of DTC was undertaken in the context of the IMF Financial Sector Assessment Program (FSAP).[2] Prior to the mission, DTC conducted a self-assessment following the methodology of the RSSSs published in 2002 by the CPSS-IOSCO. The assessors[3] also benefited from discussion with the Securities and exchange Commission (SEC), the Federal Reserve Board and Federal Reserve Bank of New York representatives (supervision and oversight), as well as with the operator of DTC and some major participants in the system. Relevant authorities and the operator of the system have been very co-operative in providing additional confidential information and organizing additional meetings, when required.

3. Given the organization of the Depository Trust & Clearing Corporation (DTCC), the assessment of the three entities belonging to the group (The Depository Trust Company – DTC, the National Securities Clearing Corporation – NSCC and the Fixed Income Clearing Corporation – FICC) resulted in almost identical recommendations concerning legal risk (RSSS1 and CCP1), operational risk (RSSS11 and RCCP8) governance (RSSS13 and RCCP 13) and efficiency (RSSS 15 and RCCP14).

II. Institutional and Market Structure—Overview

4. DTC is a limited purpose trust company under the New York Banking Law, a clearing agency registered under the Securities Exchange Act, a clearing organization as defined by the Federal Deposit Insurance Corporation Improvement Act, a clearing corporation as defined in the Uniform Commercial Code, and a member bank of the Federal Reserve System. It is a depository and settlement system that effects issuance, transfer, and pledge by computerized book-entry system. DTC, the National Securities Clearing Corporation (NSCC), and the Government Securities Division of the Fixed Income Clearing

[1] The underlying Detailed Assessment Report was published in May 2010 and is available at http://www.imf.org/external/pubs/cat/longres.cfm?sk=23870.0.

[2] For further discussion see the accompanying Financial System Stability Assessment (FSSA), (www.imf.org).

[3] This assessment was carried out by Daniela Russo (external expert) and overseen by Elias Kazarian (IMF).

Corporation (FICC-GSD), assessed in the context of the U.S. FSAP, are all wholly owned subsidiaries of the Depository Trust and Clearing Corporation (DTCC). The key statistics of DTC are provided in Table 1.

Table 1. Key Statistics of Depository Trust Company (DTC), 2007–09

	2007	2008	2009
1. Value of transactions processed (USD trillions)	209.8	181.9	121.8
2. Instructions processed (millions)	324.9	316.6	299.5
3. Average value of securities settled (USD billions)	836.0	724.8	483.2
4. Peak value of assets settled (USD billions)	1,322	1,287	791.0
5. Total Value of securities held (USD trillions), of which:	40.0	27.6	33.9
5.1 Commercial paper	26.7	20.9	15.7
5.2 Money market certificates of deposits	10.7	12.1	10.4
5.3 Other money market Instruments securities	20.3	23.3	20.2
6. Number of issues accepted	54,266	53,402	40,067
7. Number of direct participants	467	413	390
8. Overnight credit[2] (USD billions)	1.4	1.9	1.9
9. Collateral provision outstanding (USD millions)	907.00	932.36	1,718.747

Source: DTCC.
1. Value of end of day committed credit facility for USD settlements. The facility was not drawn on for any of the days noted. The current facility is 364 day facility that expires in May of the following year.
2. Value of the Participant Fund (all cash).

5. DTC provides its participants with various settlement services to facilitate the end-of-day settlement of obligations resulting from their trading activity in various markets. Besides the main settlement services, DTC provides a range of settlement, custody, and tax-related services for its members. DTC serves three different markets, namely (i) money market instruments, (ii) equities, and (iii) corporate and municipal bonds (Table 1).

6. The oversight, regulation, and supervision of DTC is conducted by different authorities owing to the organizational structure of DTC: (i) the Federal Reserve Board that derives its supervisory authority from DTC's membership in the Federal Reserve System as a State member bank, (ii) the SEC whose authority stems from DTC's operations as a clearing agency; (iii) the New York Banking State Department (NYSBD) whose supervisory authority derives from DTC's charter as a limited purpose trust company under the New York banking law.

III. Main Findings

Legal Framework (Rec. 1)

7. DTC's activities are governed by a consistent set of laws, regulations, and contractual arrangements that form a sound legal foundation for clearing, settlement and custody activities, which are publicly available and readily accessible to system participants.

Pre-settlement Risk (Rec. 2–5)

8. DTC does not fully offer trade confirmation services, as it is performed at the broker level provided to the NSCC on a "locked-in basis". OTC equity product and fixed income transactions are not matched at the market place of execution. DTC does not match settlement instructions prior to settlement. DTC does not monitor settlement fails. For trades cleared by NSCC, the CCP monitors settlement fails, the figures of which are available on the SEC's website, and has put in place incentives to settle in time. The settlement cycle for trades is generally T+3. Cost-benefit analysis for a shorter settlement fail have been conducted under the aegis of SEC. Not all transactions settled by DTC are cleared by NSCC or another CCP. For those transactions not cleared by a CCP, neither market participants nor U.S. regulators conducted a cost-benefit analysis.

Settlement Risk (Rec. 6–10)

9. The majority of securities settled in DTC are represented by physical certificates immobilized in the depository, although the trend is towards dematerialization. The vast majority of municipal and corporate debt issues distributed through DTC are in book-entry only form. Transfer of ownership occurs when securities are transferred between participants within the system. DTC relies on a DVP model 2 with securities settled on an intraday gross basis and associated funds on a net basis at the end of the day. All valued transactions in DTC are settled on a DVP basis. Finality of settlement occurs intraday for securities deliveries but at the end of the day for cash transfers outside DTC. To facilitate settlement through the day, DTC provides liquidity to participants, based on rigorous risk management procedures. DVP transactions are processed by debiting the securities from the account of the delivering participant and at the same time crediting the delivering participant the corresponding payment amount. DTC then reflects a payment debit and securities credit in the account of the receiving participant, treating the securities credit as an incomplete transaction. Should a participant default, DTC will be exposed to financial risks depending on its ability to timely liquidate the collateral of the defaulting participant. However, full collateralization of any intraday net debit money positions assures that, should several major participants fail to pay for their net debit money obligations at the end of the day, DTC would have sufficient collateral value (inclusive of haircuts) to cover the participants' unpaid obligation. For cash settlement, DTC relies on settling banks—settling for their own and other participants—making the payments from and to DTC's account at the FRBNY. There is a high concentration of payment flows at the top five settling banks in DTC. This concentration is currently not monitored by DTC.

Operational Risk (Rec. 11)

10. DTCC has developed business continuity arrangements at the level of the holding company, covering all sites; networks control centres and business sites as a unified complex. In doing so, DTCC has taken into account the requirements of the "Interagency paper on sound practices to strengthen the resiliency of the U.S. financial system".[4] DTCC

[4] "Interagency paper on sound practices to strengthen the resiliency of the U.S. financial system", Federal Reserve Board, Securities and Exchange Commission, Office of the Comptroller of the Currency, 2003.

has in place adequate procedures to identify and minimize the sources of operational risk that may arise in the clearing and settlement process. Contingency plans and back-up facilities are regularly tested and maintained to ensure the resilience of DTC. A risk-based review of the IT system supporting DTCC functioning is performed by independent external auditors. Senior management regularly reviews operational reliability issues.

Custody Risk (Rec. 12)

11. DTC operates an indirect holding system where securities (or interest in securities) are registered in the name of the direct participants through nominee accounts rather than in the name of the end beneficiary. Physical and technical controls as well as periodic audits are performed by DTC's regulators and Internal Audit Department.

Other Issues (Rec. 13–19)

12. There is a single governance structure for all the subsidiaries of DTCC. Currently, DTCC's Board is composed of 18 members. Members of the Board are elected by the shareholders annually. Although DTCC's governance arrangements are made public on its website, not all the relevant information is publicly available. DTC's access and exit criteria are publicly disclosed and the same eligibility rules apply to all participants depending on the scope of the service used regardless of the type, identity and location of the participant. DTC reviews in the annual budget process its pricing levels which are cost-based. The cost allocation methodology is part of a regular review by both internal and external auditors. DTCC ensured that each service of the DTCC group does not cross-subsidise the cost and expenses of the others. DTC uses international standards for its cross-border linkages with foreign central securities depositories (CSDs). The laws, regulations, rules and procedures governing DTC are publicly available. Moreover, following the Federal Reserve Payment System Risk Policy, DTC has completed a self assessment following the RSSSs assessment methodology.

13. The responsibilities and objectives of relevant public authorities with regard to DTC activities are clearly defined and publicly disclosed. DTC is regulated and overseen by the SEC, the Federal Reserve and the NYSBD. The SEC has entered into memoranda of understanding with foreign regulators to facilitate the exchange of information with authorities of all the countries with which DTC has developed links, except for Peru.

14. DTC maintains links with 13 foreign CSDs, of which two are bilateral, i.e., both inbound link (foreign CSD opened accounts at DTC) and outbound link (DTC opened accounts with a foreign CSD). For inbound links, linked CSDs are treated as other participants in DTC, while for outbound links DTC conducts an assessment of the risks associated with the establishment of the link before allowing its participants to process transactions with a foreign CSD's participants.

Table 2. Summary of Observance with the CPSS-IOSCO Recommendations

Responsibility	*Assessment*
Legal risk	
1. Securities settlement systems should have a well-founded, clear, and transparent legal basis in the relevant jurisdiction.	DTC's activities are governed by a consistent and transparent set of laws, regulations, and contractual arrangements that form a sound legal basis.
Pre-settlement risk	
2. Confirmation of trades between market participants should occur as soon as possible after trade execution, but no later than the trade date (T+0). Where confirmation of trades by indirect market participants (such as institutional investors) is required, it should occur as soon as possible after trade execution, preferably on T+0, but no later than T+1.	To enhance risk management procedures, DTC should explore the possibility to introduce an instructions matching mechanism prior to settlement.
3. Rolling settlement should be adopted in all securities markets. Final settlement should occur no later than T+3. The benefits and costs of a settlement cycle shorter than T+3 should be assessed.	DTC does not fully offer trade confirmation services, and does not match settlement instructions prior to settlement.
4. The benefits and costs of a central counterparty should be assessed. Where such a mechanism is introduced, the central counterparty should rigorously control the risks it assumes.	No cost-benefit analysis of the introduction of a CCP for transactions settled through DTC but not cleared by NSCC has been conducted.
5. Securities lending and borrowing (or repurchase agreements and other economically equivalent transactions) should be encouraged as a method for expediting the settlement of securities transactions. Barriers that inhibit the practice of lending securities for this purpose should be removed.	Securities lending and repurchase arrangements in the U.S. are largely over-the-counter bilateral transactions. It seems that there are no legal impediments to securities loan and repo transactions.
Settlement risk	
6. Securities should be immobilized or dematerialized and transferred by book entry in CSD to the greatest extent possible.	Many securities issued to the public in the U.S. are in the form of physical certificates. However, trend is to issue shares in electronic form.
7. Securities settlement systems should eliminate principal risk by linking securities transfers to funds transfers in a way that achieves delivery versus payment.	DTC operates a DVP Model 2 settlement system, where securities settle on a gross basis intraday and associated funds settle on a net basis at the end of the day.
8. Final settlement on a DVP basis should occur no later than the end of the settlement day. Intra-day or real-time finality should be provided where necessary to reduce risks.	The DVP 2 model is characterized by securities delivered during the day, while finality of cash takes place at the end of day. DTC has in place measures to limit and control the liquidity and credit risks associated with this model. DTC does not provide intraday finality for cash transfer that would allow participants in a net credit position to have earlier access to their liquidity and

Responsibility	*Assessment*
	move them out of DTC.
9. CSDs that extend intraday credit to participants, including CSDs that operate net settlement systems, should institute risk controls that, at a minimum, ensure timely settlement in the event that the participant with the largest payment obligation is unable to settle. The most reliable set of controls is a combination of collateral requirements and limits.	Although DTC currently has sufficient liquidity resources to protect against the failure of the largest affiliated family of participants, more extreme cases of multiple failures could test DTC's liquidity resources.
10. Assets used to settle the ultimate payment obligations arising from securities transactions should carry little or no credit or liquidity risk. If Central Bank money is not used, steps must be taken to protect CSD members from potential losses and liquidity pressures arising from the failure of the cash settlement agent whose assets are used for that purpose	There is a high concentration of payment flows at the top five settling banks, which increases credit risk exposures of the settlement banks. Moreover, DTC relies on a single bank for the cash settlement for Canadian dollar. The self-assessment of the Federal Reserve's NSS against the CPSIPS has not been reviewed by the relevant authorities and is not public.
Operational risk	
11. Sources of operational risk arising in the clearing and settlement process should be identified and minimized through the development of appropriate systems, controls, and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. Contingency plans and back-up facilities should be established to allow for timely recovery of operations and completion of the settlement process.	Contingency plans and backup facilities for the failure of key systems are not tested and reviewed with participants (only connectivity is tested with the critical participants).
Custody risk	
12. Entities holding securities in custody should employ accounting practices and safekeeping procedures that fully protect customers' securities. It is essential that customers' securities be protected against the claims of a custodian's creditors.	DTC has adequate procedures and measures in place to ensure the protection of customers' securities.
Other issues	
13. Governance arrangements for CSDs and central counterparties should be designed to fulfill public interest requirements and to promote the objectives of owners and users.	The governance arrangements for DTC could be more transparent, including criteria for the composition and selection of Board members. Only limited information is available to the public.
14. CSDs and central counterparties should have objectives and publicly disclosed criteria for participation that permit fair and open access.	DTC's rules and by-laws, which are available on its website, provide objective access rules and criteria.
15. While maintaining safe and secure operations, securities settlement systems should be cost-	DTC's fees are cost based and DTC returns to its users excess net revenues not needed to fund its

Responsibility	*Assessment*
effective in meeting the requirements of users.	operations via rebates or other refunds. DTCC performs periodic benchmarking studies to assess cost effectiveness in the market place.
16. Securities settlement systems should use or accommodate the relevant international communication procedures and standards in order to facilitate efficient settlement of cross-border transactions.	DTC uses ISO 15022 for cross-border linkages with CSDs. The messages (ISO-based and Message Queuing) are sent and received over DTC's proprietary system as well as SWIFT.
17. CSDs and central counterparties should provide market participants with sufficient information for them to accurately identify the risks and costs associated with using the CSD or central counterparty services.	DTC's rules and procedures, including its service guides, are publicly available on its website.
18. Securities settlement systems should be subject to regulation and oversight. The responsibilities and objectives of the securities regulator and the central bank with respect to SSSs should be clearly defined, and their roles and major policies should be publicly disclosed. They should have the ability and resources to perform their responsibilities, including assessing and promoting implementation of these recommendations. They should cooperate with each other and with other relevant authorities.	The Fed's oversight of DTC is not based on a general statutory payment systems oversight authority, but rather on DTC's status as a State Member Bank of the Fed and the Fed's consequent role as banking supervisor. The banking supervision and the oversight functions have two different objectives and use different tools. The SEC has not yet required DTC to perform a self assessment with respect to RSSSs, but SEC staff would consider recommending to the Commission to require such a self-assessment.
19. CSDs that establish links to settle cross-border trades should design and operate such links to reduce effectively the risks associated with cross-border settlement.	DTC has adequate measures and procedures to handle the risk associated with links.

Table 3. Actions to Improve Compliance

Reference Recommendation	*Recommended Action*
Recommendation 2: Trade confirmation	DTC should explore the possibility introducing an instructions matching mechanism prior to settlement.
Recommendation 4: CCPs	A cost-benefit analysis of the introduction of a CCP for transactions not cleared by NSCC should be conducted.
	DTC should consider conducting additional net funds settlement batches during the day in order to provide intraday finality for cash transfers.
Recommendation 9: Risk controls	DTC should be given access to central bank liquidity facilities.

Reference Recommendation	*Recommended Action*
Recommendation 10: Cash settlement	DTC should continue to monitor the financial conditions and should begin monitoring the exposures of the settlement banks. DTC needs to reduce the concentration of settlement cash for Canadian dollar. DTC may explore the possibility of becoming a direct participant of the Canadian RTGS system. The self-assessment of the Federal Reserve's NSS against the CPSIPS should be reviewed by the relevant authorities and made public.
Recommendation 11: operational risk	DTCC should test its back-up sites to critical participants' backup sites.
Recommendation 13: Governance	DTC's governance arrangements should be more clearly specified and transparent, including criteria for the composition and selection of Board members.
Recommendation 18: Oversight and regulation	Formal co-operation with Authorities in Peru needs to be established. It would be more effective and transparent to legally entrust the Fed the role of overseer of financial market infrastructure, and to separate between the banking supervision and the oversight functions. SEC is encouraged to require clearing agencies to perform self-assessments against the CPSS-IOSCO recommendations by rules or in a policy statement.
Recommendation 19:Risks in links	DTC should update the information on links on DTCC's website to reflect the current status.

IV. Authorities' Response to the Assessment

15. The U.S. authorities welcome the IMF's assessment of DTC against the RSSSs. We appreciate the significant undertaking associated with an FSAP review of the biggest financial sector in the world, as well as the challenges that accompany the first assessment of a large advanced country in the wake of the crisis. The authorities are pleased to note that the IMF's assessment reflects the high degree of compliance of DTC with the RSSSs, and are largely in agreement with the assessment's comments and recommendations, which the authorities will share with DTC.

16. Again, the authorities appreciate the significant undertaking associated with the assessment of DTC and the contribution that the assessment process makes to the stability and effective regulation and oversight of systemically important payment, clearing and settlement systems.

FINANCIAL SECTOR ASSESSMENT PROGRAM

UNITED STATES OF AMERICA

THE NATIONAL SECURITIES CLEARING CORPORATION
OBSERVANCE OF THE CPSS/IOSCO RECOMMENDATIONS FOR CENTRAL COUNTERPARTIES

REPORT ON STANDARDS AND CODES (ROSC)

JULY 2010

INTERNATIONAL MONETARY FUND
MONETARY AND CAPITAL MARKETS DEPARTMENT

Contents Page

Glossary

BCP	Business Continuity Plan
BITS	Banking, Infrastructure and Technology Services
CCP	Central Counterparty
CPSS	Committee on Payment and Settlement Systems
DTC	Depository Trust Company
DTCC	Depository Trust and Clearing Corporation
DVP	Delivery-versus-Payment
FDIA	Federal Deposit Insurance Act
FDICIA	Federal Deposit Insurance Corporation Improvement Act
FDIC	Federal Deposit Insurance Corporation
FICC-GSD	Fixed Income Clearing Corporation – Government Securities Division
FICC-MSBD	Fixed Income Clearing Corporation – Mortgage Backed Securities Division
FR	Federal Reserve
FRA	Federal Reserve Act
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commission
ISO	International Organisation for Standardisation
JPMC	JP Morgan Chase
NSCC	National Securities Clearing Corporation
NSS	National Settlement Service
RCCP	Recommendation for Central Counterparties
RSSS	Recommendation for Securities Settlement Systems
SEC	Securities and Exchange Commission
SIFMA	Securities Industry and Financial Markets Association
TRADES	Treasury/Reserve Automated Debt Entry System
UCC	Uniform Commercial Code

I. Introduction and Methodology

1. The National Securities Clearing Corporation (NSCC) observes or broadly observes most of the CPSS-IOSCO Recommendations for CCP (RCCPs).[1] The system properly addresses legal, credit, custody, and operational risks. Some measures to improve resilience against financial risks have been identified, including measures to enhance governance arrangements. It is however important that NSCC effectively addresses issues concerning financial resources, money settlement (including DVP arrangements), and links between CCPs. It would also be beneficial that the Securities and Exchange Commission (SEC) require NSCC's compliance with RCCPs and that the Federal Reserve is provided with a legal mandate to oversee the NSCC, which is a systemically important system, as a complementary function to the existing SEC regulation and supervision.

2. The assessment of the NSCC was undertaken in the context of the IMF Financial Sector Assessment Program (FSAP).[2] Prior to the mission, NSCC conducted a self-assessment following the methodology of the RCCPs published by the CPSS-IOSCO in 2004. The assessment also benefited from discussions with the SEC, the Federal Reserve Board and Federal Reserve Bank of New York representatives, as well as the operator of the NSCC and some major participants in the system.[3] Relevant authorities and the operator of the system have been very co-operative in providing additional confidential information and organizing additional meetings, when required.

3. Given the organization of the Depository Trust & Clearing Corporation (DTCC), the assessment of the three entities belonging to the group: The Depository Trust Company (DTC), the NSCC, and the Fixed Income Clearing Corporation (FICC) is almost identical for the recommendations on legal risk (RSSS1 and CCP1), operational risk (RSSS11 and RCCP8) governance (RSSS13 and RCCP13), efficiency (RSSS15 and RCCP14) and links (RSSS19 and RCCP11).

II. Institutional and Market Structure—Overview

4. The NSCC is registered as a clearing agency with the Securities and Exchange Commission (SEC) and subject to the SEC's oversight. It was established in 1976 as a New York business corporation, and since 1999 it became a wholly-owned subsidiary of the Depository Trust & Clearing Corporation (DTCC).

5. NSCC provides central counterparty services for certain transactions for the vast majority of broker-to-broker trades involving equities, corporate and municipal bonds. In

[1] The underlying Detailed Assessment Report was published in May 2010 and is available at http://www.imf.org/external/pubs/cat/longres.cfm?sk=23871.0.

[2] For further discussion see the accompanying Financial Stability Assessment (FSSA), (www.imf.org).

[3] This assessment was carried out by Daniela Russo (external expert) and overseen by Elias Kazarian (IMF).

addition, NSCC provides a range of other services to its members, namely wealth management and insurance services, automated customer account transfer services and risk management. As of December 2009, NSCC had 206 clearing members, including 3 foreign institutions Table 1.

Table 1. Key Statistics of NSCC, 2007–09

	2007	2008	2009
1. Number of contracts and transactions cleared (millions)	13,537	21,877	23,254
2. Value of contracts and transaction cleared (USD billions)	283,200	315,100	209,690
3. Average daily value of transactions (USD billions)	1,137	1,255	835
4. Peak value of transactions (USD billions)	2,230	3,373	1,091
5. Total number of clearing members, of which:	226	221	206
5.1 Foreign clearing members	3	4	3
6. Clearing fund (USD millions)[1]	4,866.6	6,620.4	2,941.0

Source: DTCC.
1. Includes the value of cash and securities.

III. Main Findings

Legal Framework (Rec. 1)

6. NSCC's activities are governed by a consistent set of laws, regulations and contractual arrangements that form a sound legal foundation for clearing, settlement and custody activities, which are publically available and readily accessible to system participants.

Participation requirements (Rec. 2)

7. The NSCC's access and exit criteria are publicly disclosed. NSCC requirements for participants' financial resources and credit worthiness are based on the legal nature of the participating entities as well as the services that these entities will use. The NSCC also assesses the participants' financial strength and operational reliability.

Financial risk management (Rec. 3–6)

8. The NSCC measures its exposures to participants daily and requires payment of contributions to the clearing fund. It can, when deemed appropriate, conduct intraday calls for additional clearing funds. The NSCC mitigates its credit exposures on the basis of the clearing fund requirements as well as cross-guarantee and cross-margining arrangements. The NSCC conducts stress testing monthly, on the basis of scenarios selected from the past ten years together with specific historic events. NSCC's liquidity resources are composed of cash and securities and committed credit facility by some banks. In case of insufficient cash resources, the NSCC seeks to liquidate the available collateral via repo arrangements. NSCC's default procedures are clearly stated in the system's rules and procedures.

Custody and investment risks (Rec. 7)

9. NSCC's securities and cash of the clearing fund are held in dedicated accounts with the two major clearing banks. Cash investments are authorized under a policy, approved by DTC's Audit Committee, which outlines principles for mitigating the risk of losses stemming from unsecured investments. The NSCC assets are held under tri-party custodial arrangements. When repos are not available, the assets are invested in overnight commercial paper in bank sweep accounts.

Operational risk (Rec. 8)

10. NSCC business continuity arrangements are developed at the level of DTCC holding company, including all sites, networks control centres, and back-up sites as a unified complex. These arrangements are based on the authorities' requirements. DTCC has in place adequate procedures to identify and mitigate the sources of operational risk. Contingency plans and back-up facilities are regularly tested and maintained to ensure the resilience of NSCC.

Money settlements (Rec. 9)

11. The NSCC settles its money obligations in commercial bank money.

Physical deliveries (Rec. 10)

12. The NSCC rules clearly set forth its obligations with respect to securities deliveries. In order to protect itself from principal risk linked to market movements, NSCC continuously monitors participants' exposures and collect margins when required. The NSCC uses a "modified" DVP mechanism, under which securities are delivered with finality to the participants only if the NSCC has received the cash or is in a credit position vis-à-vis the relevant clearing member.

Risks in links between CCPs (Rec. 11)

13. The NSCC has established three links to the Option Clearing Corporation (OCC) and the Canadian Clearing and Depository Services Inc (CDS). According to the NSCC, an assessment of the associated risks with these links has been conducted.

Efficiency (Rec. 12)

14. The NSCC regularly reviews its pricing levels, which are based on cost recovery. The cost allocation methodology is part of a regular review by both internal and external auditors. NSCC also conducts benchmark studies to assess cost effectiveness in the market. According to DTCC, internal auditors ensure that each service provided by DTCC group does not cross-subsidise the cost and expenses of the others, and that the risk management financial resources are not commingled.

Governance (Rec. 13)

15. There is a single governance structure for all DTCC subsidiaries, including the NSCC. Although DTCC's governance arrangements are made public, not all the relevant information is publicly available. DTCC is currently in the process of reviewing its governance arrangements. Public interest is taken into account in a number of ways, including the requirement that all proposed rule changes of NSCC be filed with the SEC and noticed for public comment, and by discussion with industry participants.

Transparency (Rec. 14)

16. Market participants are provided with sufficient information regarding NSCC risk management. The regulations, rules and procedures governing the NSCC are publicly available, as are audited annual financial statements, and participants receive non audited quarterly financial statements. The NSCC has completed and publishes on its website a self assessment following the RCCPs assessment methodology.

Regulation and oversight (Rec. 15)

17. The responsibilities and objectives of relevant public authorities with regard to securities clearing and settlement systems are clearly defined and publicly disclosed. The SEC supervises the NSCC given its status of a registered clearing agency. In conducting its responsibilities, the SEC applies other standards than the RCCPs, although some of the issues covered by the RCCPs are also addressed by the standards under the securities laws that are applied by the SEC. The Federal Reserve has the authority to examine the NSCC as an affiliate of DTC. The SEC and the Federal Reserve have signed exam-specific information sharing arrangements regarding the oversight of NSCC. A cooperation framework (MoU) between the SEC and the Canadian authorities has been set for the supervision of the links, while there is no such arrangement with the Monetary Authority in Singapore (MAS).

Table 2. Summary of Observance with the CPSS-IOSCO Recommendations

Responsibility	Assessment
Legal risk	
1. Central counterparties should have a well-founded, clear and transparent legal basis in the relevant jurisdiction.	NSCC's activities are governed by a consistent and transparent set of laws, regulations and contractual arrangements that form a sound legal basis.
Participation requirement	
2. A CCP should require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the CCP. A	The NSCC has adequate financial requirements for participants, which are based on the type of the entity and the provided services. NSCC defines a

Responsibility	Assessment
CCP should have procedures in place to monitor that participation requirements are met in an on-going basis. A CCP's participation requirements should be objectives, publicly disclosed, and permit fair and open access.	net capital requirement, which is above the minimum capital requirement imposed by the SEC. Moreover, all members contribute to the Clearing Fund, with the amount defined by the NSCC. The NSCC assesses participants' financial and operational capability, including: (a) sufficient financial ability to make anticipated contributions to the Clearing Fund and to meet obligations to the NSCC; (b) an established business history of a minimum of six months or personnel with sufficient operational background and experience; (c) appropriate settling bank arrangements; and (d) appropriate communication procedures.
Measurement and management of credit exposures	
3. A CCP should measure its credit exposure to its participants at least once a day. Through margin requirements, other risk control mechanisms or a combination of both, a CCP should limit its exposure to potential losses from defaults of its participants in normal market conditions so that the operation of the CCP would not be disrupted and non-defaulting participants would not be exposed to losses that they cannot anticipate or control.	The definition of margins and clearing funds in the published assessment is not consistent with international usage/practice and the definitions provided in the glossary of the RCCPs.
Margin requirements	
4. If a CCP relies on margin requirements to limit its credit exposures to participants, these requirements should be sufficient to cover potential exposures in normal market conditions. The models and parameters used in setting margin requirements should be risk-based and reviewed regularly.	The NSCC relies on margin requirements to collect contributions to the clearing fund to cover its exposure vis-à-vis its members. The NSCC tests regularly participants' exposures as a basis to determine the contributions to the clearing fund.
Financial resources	
5. A CCP should maintain sufficient financial resources to withstand, at a minimum, the default of a participant to which it has the largest exposure in extreme but plausible market conditions.	NSCC's liquidity can be increased by repoing the securities in the clearing fund. However, this arrangement cannot be considered as a committed line, since there is no complete assurance that the repo markets would be effective in extreme market situations.
Default procedures	
6. A CCP default procedures should be clearly stated, and should ensure that the CCP can take timely action to contain losses and liquidity pressure and to continue meeting its obligations. Key aspects of the default procedures should be publicly available.	NSCC's default procedures are clearly stated in the system's rules and procedures, which would allow the NSCC to suspend or terminate a member for any service, should it become subject to insolvency proceedings or fail to perform its obligations to the

Responsibility	Assessment
	system. The U.S. legal framework provides a high degree of assurance with regard to the enforceability of default procedures.
Custody and investment risk	
7. A CCP should hold assets in a manner whereby risk of loss or of delay in its access to them is minimized. Assets invested by a CCP should be held in instruments with minimal credit, market and liquidity risks.	NSCC's assets are highly concentrated in two major commercial banks, and not all NSCC's investments are secured.
Operational risk	
8. A CCP should identify sources of operational risk and minimize them through the development of appropriate systems, controls and procedures and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. Business continuity plans should allow for timely recovery of operations and fulfilment of a CCP's obligations.	Contingency plans and backup facilities for the failure of key systems are not tested and reviewed with participants (only connectivity is tested with the critical participants).
Money settlements	
9. A CCP should employ money settlement arrangements that should eliminate or strictly limit its settlement bank risks, that is, its credit and liquidity risk from the use of banks to effect money settlements with its participants. Funds transfers to a CCP should be final when effected.	The NSCC relies on a settlement agent to settle end-of-day funds in central bank money since it does not have access to Federal Reserve accounts. Access to central bank would require either the NSCC being chartered as a bank or statutory changes to grant the Federal Reserve legal authority to provide accounts to the NSCC.
Physical deliveries	
10. A CCP should clearly state its obligations with respect to physical deliveries. The risks from these obligations should be identified and managed.	Securities delivered to the NSCC are promptly redelivered to parties that are entitled to receive them through an allocation algorithm.
Risks in links between CCPs	
11. CCPs that establish links either cross-border or domestically to clear trades should evaluate the potential sources of risks that can arise, and ensure that the risks are managed prudently on an ongoing basis. There should be a framework for cooperation and coordination among the relevant regulators and overseers.	The NSCC has appropriate risk management procedures in place to identify and evaluate the risks from the links. A framework for cooperation (MoU) between the SEC and the Canadian authorities has been set for the link to the Canadian system.
Efficiency	
12. While maintaining safe and secure operations, CCPs should be cost-effective in meeting the requirements of participants.	The NSCC regularly reviews its pricing levels, which are cost-based. It also conducts benchmark studies to assess cost effectiveness in the market.
Governance	
13. Governance arrangements for a CCP should be clear and transparent to fulfil public interest requirements and to support the objectives of owners	The NSCC governance arrangements are not sufficiently specified and transparent, including criteria for the composition and selection

and participants. In particular, they should promote the effectiveness of a CCP's risk management procedures.	of Board members.
Transparency	
14. A CCP should provide market participants with sufficient information for them to identify and evaluate accurately the costs and risks associated with using its services.	The regulations, rules, and procedures governing NSCC are publicly available, as are annual audited financial statements, and participants receive unaudited quarterly financial statements.
Regulation and oversight	
15. A CCP should be subject to transparent and effective regulation and oversight. In both a domestic and an international context, central banks and securities regulators should co-operate with each other and with other relevant authorities.	The SEC has not formally required NSCC to perform self-assessment based on the RCCPs. The Federal Reserve does not have a legal mandate to oversee the NSCC, other than its authority to examine NSCC as an affiliate of DTC.

Table 3. Actions to Improve Compliance

Reference Recommendation	***Recommended Action***
Recommendation 3: Credit exposures management	Align the definitions of margins and clearing funds with international standards.
Recommendation 5: Financial resources	Consider additional liquidity buffer to deal with extreme situations where repo arrangements cannot be used. Consider conducting more frequently stress testing than once a month, in particular, in times of unusual market volatility. Disclose stress testing assumptions to participants.
Recommendation 7: Custody and investment risk	Continue to monitor and mitigate the potential risks, which result from holding assets at only two commercial banks. Avoid to the largest extent possible unsecured investments.
Recommendation 8: Operational risk	Test and review NSCC's backup sites to critical participants' backup sites.
Recommendation 9: Money settlements	Give NSCC access to central bank accounts and Fedwire Securities Services.
Recommendation 13: Governance	NSCC's governance arrangements should be more clearly specified and transparent, including criteria for the composition and selection of board members.
Recommendation 15: Regulation and oversight	SEC should formally required NSCC to perform a self-assessment based on RCCPs. Ensure the compliance of the SEC rules with the RCCPs. Provide legal mandate to the Federal Reserve to oversee NSCC, as a complement to the SEC regulation and supervision.

IV. Authorities' Response to the Assessment

18. The U.S. authorities welcome the IMF's assessment of the NSCC against the RCCP. We appreciate the significant undertaking associated with an FSAP review of the biggest financial sector in the world, as well as the challenges that accompany the first assessment of a large advanced country in the wake of the crisis. The authorities are pleased to note that the IMF's assessment reflects the high degree of compliance of the NSCC with the RCCPs, and will work with the NSCC in considering the assessment's specific comments and recommendations. Again, the authorities appreciate the significant undertaking associated with the assessment of the NSCC and the contribution that the assessment process makes to the stability and effective regulation and oversight of systemically-important payment, clearing and settlement systems.

FINANCIAL SECTOR ASSESSMENT PROGRAM

UNITED STATES OF AMERICA

THE FEDWIRE SECURITIES SERVICE'S OBSERVANCE'S OF THE CPSS-IOSCO RECOMMENDATIONS FOR SECURITIES SETTLEMENT SYSTEMS

REPORT ON STANDARDS AND CODES (ROSC)

JULY 2010

INTERNATIONAL MONETARY FUND
MONETARY AND CAPITAL MARKETS DEPARTMENT

Contents Page

Glossary

CCP	Central Counterparty
CPSS	Committee on Payment and Settlement Systems
CSD	Central Securities Depository
DTC	Depository Trust Company
DTCC	Depository Trust and Clearing Corporation
DVP	Delivery-versus-Payment
FSS	Fedwire Securities Service
FICC	Fixed Income Clearing Corporation
FICC-GSD	Fixed Income Clearing Corporation – Government Securities Division
FICC-MSBD	Fixed Income Clearing Corporation – Mortgage Backed Securities Division
GSE	Government Sponsored Entity
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commission
ISO	International Organization for Standardization
NSCC	National Securities Clearing Corporation
PSPAC	Payment System Policy Advisory Committee
RCCP	Recommendation for Central Counterparties
RSSS	Recommendation for Securities Settlement Systems
SEC	Securities and Exchange Commission
SWIFT	Society for Worldwide Interbank Financial Telecommunication
WPO	Wholesale Product Office

I. Introduction and Methodology

1. The assessment of the Fedwire Securities Service (FSS),[1] owned and operated by the Federal Reserve System, against the CPSS-IOSCO Recommendations for Securities Settlement Systems (RSSSs) reveals that the system is sound, efficient, and reliable. For operational risks, the U.S. requirements go beyond those of the RSSSs. However, some regulatory changes are needed to ensure "fair" and open access to the system by other entities than U.S. banks. Although the Federal Reserve Board oversees the system based on its supervisory responsibility for the Banks, it would be beneficial and effective to have an explicit legal basis for oversight of all systemically important securities clearing and settlement systems.

2. The assessment of FSS was undertaken in the context of the IMF Financial Sector Assessment Program (FSAP).[2] Prior to the mission, the Federal Reserve Board assessed the FSS following the RSSSs methodology published in 2002 by the CPSS-IOSCO. The assessment has been based on the self assessment, and a review of the relevant rules and regulations. The assessment also benefited from discussion with the operator of the system and meetings with market participants arranged by the authorities. Relevant authorities have been very co-operative in providing additional confidential information and organizing additional meetings, when required.[3]

II. Institutional and Market Structure—Overview

3. The Reserve Banks operate FSS on a consolidated basis through the Federal Reserve Bank of New York's Wholesale Product Office. In their capacity as fiscal agents, the Federal Reserve Banks act as the central securities depositories (CSD) for securities issued by the Treasury, federal agencies, government sponsored entities, and certain institutional organizations. The FSS is also the key interbank settlement system for Fedwire-eligible securities. FSS' participants include depository institutions and certain other institutions, including U.S. branches and agencies of foreign banks. The key statistics of FSS are provided in Table 1.

4. Various institutional and market arrangements facilitate the issuance, trading, clearing, and settlement of Fedwire-eligible securities. The Reserve Banks, through FSS, provide key issuance and settlement services. In addition, the FICC and the two clearing banks, JP Morgan Chase (JPMC) and Bank of New York Mellon (BoNY), perform clearance and settlement functions for market participants. A large share of settlement of Government

---

[1] The underlying Detailed Assessment Report was published in May 2010 and is available at http://www.imf.org/external/pubs/cat/longres.cfm?sk=23869.0.

[2] For further discussion see the accompanying Financial System Stability Assessment (FSSA), (www.imf.org).

[3] This assessment was carried out by Daniela Russo (external expert) and overseen by Elias Kazarian (IMF).

securities is internalized in the two clearing banks. No official figure is available on internalization.

5. The FSS is overseen by the Federal Reserve Board, which regularly assesses the FSS against the RSSSs. The assessments have been made publicly available since 2007. Furthermore, the Federal Reserve banking supervisors, the Securities Exchange Commission (SEC), and the Treasury provide relevant perspectives on the market context in which Fedwire operates. In particular, the SEC is the regulator of many participants in the government securities market and the central counterparty (CCP).

Table 1. Key Statistics of FSS, 2007–09

	2007	2008	2009
1. Turnover (USD trillions)	435.6	419.3	295.7
2. Instructions processed (millions, total for the year)	24.2	25.0	21.1
3. Average daily value of transfers (USD trillions)	1.73	1.66	1.17
4. Peak daily value of securities settled (USD trillions)	2.60	2.81	2.55
5. Total value of securities held (USD trillions,), of which:	43.18	47.27	52.58
5.1 Treasury securities	4.54	5.80	7.27
5.2 Securities issues by federal agencies	2.78	3.12	3.82
5.3 Securities issued by GSE	35.81	38.28	40.41
6. Number of new issues (thousands)	98.4	100.8	74.5
7. Number of participants, of which:	7,500	6,700	6,300
7.1. Number of active participants	2,645	2,558	2,566

Source: The Federal Reserve.

III. Main Findings

Legal Framework (Rec. 1)

6. The FSS activities are governed by a consistent set of laws, regulations, and contractual arrangements that form a sound legal foundation for clearing, settlement, and custody activities. This set of law and regulations is public and readily accessible to system's participants.

Pre-settlement Risk (Rec. 2–5)

7. Confirmation services for FSS eligible securities to direct participants that are cleared by CCP are provided by FICC. The FSS does not require settlement instructions to be matched prior to settlement. The settlement cycle for FSS eligible securities is generally shorter than T+3 with the exception of mortgage backed securities (MBS) that occurs on a monthly basis. The costs/benefits of the reduction of the settlement cycle have been assessed, and market participants considered establishing the CCP more appropriate than reducing the settlement cycle.

Settlement Risk (Rec. 6–10)

8. Securities settled in FSS are issued on a dematerialized basis (except for a limited number of securities that can be immobilized). Transfer of ownership occurs when securities are transferred between participants within the system. The FSS enables delivery versus payment (DVP) on a real time basis. The transfer of securities and cash occurs simultaneously and is final when the securities and cash accounts are credited and debited.

Operational Risk (Rec. 11)

9. The FSS has in place adequate procedures to identify and minimize the sources of operational risk that may arise in the settlement process. Contingency plans and back-up facilities are regularly tested and maintained to ensure the resilience of the FSS. The business continuity plan takes into account the dependence between FSS and Fedwire Funds. A risk-based review of the IT system supporting the FSS functioning is conducted by independent external auditors. Senior management regularly monitors operational reliability issues.

Custody Risk (Rec. 12)

10. The FSS operates an indirect holding system where securities (or interest in securities) are held for the sole benefit of the direct participants whose account has been credited and not for the benefit of any other party. Physical and technical controls as well as periodic audits are performed to ensure that the Reserve Banks records are accurate and to ensure that customers' securities are adequately managed.

Other Issues (Rec. 13–19)

11. The FSS access and exit criteria are publicly disclosed. Currently, some key market participants such as nonbank broker-dealers are not allowed to access the FSS on the basis of non-risk related criteria. Furthermore, entities not physically present in the United States, cannot have access to FSS, as they are not covered by U.S .banking supervision authorities. Following the Monetary Control Act (1980), the Federal Reserve Banks are required to recover direct but also imputed costs that would have been incurred if a private firm was offering this service. The FSS uses a proprietary message format, which can be translated to and from international message standards. It is currently not envisaged to use instead SWIFT or ISO standards. Market participants are provided with sufficient information on FSS, including laws, regulations, rules, and procedures. Moreover, the FSS has completed a self assessment following the RSSSs assessment methodology. The self assessments are disclosed on the Federal Reserve website. The responsibilities and objectives of relevant public authorities with regard to securities settlement systems are clearly defined and publicly disclosed. The Federal Reserve Board is exercising oversight over the FSS, based on its supervisory responsibility for the Reserve Banks. The Government and Accountability Office have the legal power to audit the FSS as a Treasury Agent.

Table 2. Summary of Observance with the CPSS-IOSCO Recommendations

Responsibility	Assessment
Legal risk	
1. Securities settlement systems should have a well-founded, clear, and transparent legal basis in the relevant jurisdiction.	The FSS activities are governed by a consistent and transparent set of laws, regulations, and contractual arrangements that form a sound legal basis.
Pre-settlement risk	
2. Confirmation of trades between market participants should occur as soon as possible after trade execution, but no later than the trade date (T+0). Where confirmation of trades by indirect market participants (such as institutional investors) is required, it should occur as soon as possible after trade execution, preferably on T+0, but no later than T+1.	The FSS should explore the possibility of introducing an instructions matching mechanism prior to settlement.
3. Rolling settlement should be adopted in all securities markets. Final settlement should occur no later than T+3. The benefits and costs of a settlement cycle shorter than T+3 should be assessed.	The settlement of government bonds occurs on T+1 while the settlement of the MBS occurs on fixed monthly dates. For the compliance with this recommendation, MBS should be settled no later than T+3.
4. The benefits and costs of a central counterparty should be assessed. Where such a mechanism is introduced, the central counterparty should rigorously control the risks it assumes.	FICC-GSD acts as CCP for all FSS eligible securities except for agency MBS. In this regard, FICC has filed a proposed rule change with the SEC to allow FICC-MBSD to act as CCP for agency MBS.
5. Securities lending and borrowing (or repurchase agreements and other economically equivalent transactions) should be encouraged as a method for expediting the settlement of securities transactions. Barriers that inhibit the practice of lending securities for this purpose should be removed.	FSS does not provide a securities lending facility to its participants, although there is a well-functioning market for securities lending in the United States.
Settlement risk	
6. Securities should be immobilized or dematerialized and transferred by book entry in CSD to the greatest extent possible.	The vast majority of securities settled held in custody by FSS are issued in a dematerialized form.
7. Securities settlement systems should eliminate principal risk by linking securities transfers to funds transfers in a way that achieves delivery versus payment.	The FSS enables delivery versus payment (DVP) on a real time basis.
8. Final settlement on a DVP basis should occur no later than the end of the settlement day. Intra-day or real-time finality should be provided where necessary to reduce risks.	The finality of securities and cash transfers occur simultaneously and finality is achieved on real time when the securities and cash accounts are credited and debited.
9. CSDs that extend intraday credit to	The Fed’s net debit caps set limits on the amount of

Responsibility	Assessment
participants, including CSDs that operate net settlement systems, should institute risk controls that, at a minimum, ensure timely settlement in the event that the participant with the largest payment obligation is unable to settle. The most reliable set of controls is a combination of collateral requirements and limits.	intraday credit used by participants, which reduces the Fed total exposures to credit risk. The Fed provides uncollateralized intraday credit in order to expedite DVP settlement.
10. Assets used to settle the ultimate payment obligations arising from securities transactions should carry little or no credit or liquidity risk. If central bank money is not used, steps must be taken to protect CSD members from potential losses and liquidity pressures arising from the failure of the cash settlement agent whose assets are used for that purpose.	There is a high concentration of securities clearing and settlement in the two clearing banks, JPMC and BoNY, which also serve as the two settlement banks for the FICC. Moreover, in order to facilitate settlement of buy-sell transactions, dealers heavily rely on intraday credit provided by JPMC and BoNY. This intraday credit is uncommitted but collateralized. A problem at one of the clearing banks or a refusal to extend credit to a market participant could be disruptive to the functioning of the tri-party repo market and the settlement of securities transactions.
Operational risk	
11. Sources of operational risk arising in the clearing and settlement process should be identified and minimized through the development of appropriate systems, controls, and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. Contingency plans and back-up facilities should be established to allow for timely recovery of operations and completion of the settlement process.	The FSS has in place adequate procedures to identify and minimize the sources of operational risk, and contingency plans and back-up facilities to ensure business continuity. A risk-based review of the IT system supporting the FSS functioning is conducted by independent external auditors. Senior management regularly monitors operational reliability issues.
Custody risk	
12. Entities holding securities in custody should employ accounting practices and safekeeping procedures that fully protect customers' securities. It is essential that customers' securities be protected against the claims of a custodian's creditors.	Physical and technical controls as well as periodic audits are performed to ensure custody risk is minimized by checking, among other things, that the Reserve Banks records are accurate and customers' securities are adequately managed.
Other issues	
13. Governance arrangements for CSDs and central counterparties should be designed to fulfill public interest requirements and to promote the objectives of owners and users.	The WPO does not include representatives of smaller and midsize participants, but rather rely on feedback provided through the financial services website. This arrangement may not ensure that the needs and interests of different kinds of participants are taken into account.
14. CSDs and central counterparties should have objectives and publicly disclosed criteria for participation that permit fair and open access.	Certain key market participants such as nonbank broker dealers are not eligible to maintain accounts at the Federal Reserve. This prevents these participants from settling their trades in central bank

Responsibility	Assessment
	money thereby increasing settlement risk. Moreover, some key infrastructures are not chartered as banks, and as a consequence they cannot use directly the services of FSS.
15. While maintaining safe and secure operations, securities settlement systems should be cost-effective in meeting the requirements of users.	The operating hours of FSS are relatively short when compared to operating hours of other CSDs.
16. Securities settlement systems should use or accommodate the relevant international communication procedures and standards in order to facilitate efficient settlement of cross-border transactions.	Since FSS participation requirements prevent direct remote access from foreign participants (banks or other infrastructure) the requirement for the use of international communication procedures for cross-border transactions is not as relevant. However, international standards could become relevant should remote access of other infrastructure be allowed. In general terms, global co-operation calls for adoption of (or compatibility with) common global standards for major infrastructures at the global level.
17. CSDs and central counterparties should provide market participants with sufficient information for them to accurately identify the risks and costs associated with using the CSD or central counterparty services.	Laws, regulations, system rules, and fees are part of the contractual agreements signed by participants. In particular, participants' rights, obligations, and costs are defined in these agreements, which are also available on the Fed website.
18. Securities settlement systems should be subject to regulation and oversight. The responsibilities and objectives of the securities regulator and the central bank with respect to SSSs should be clearly defined, and their roles and major policies should be publicly disclosed. They should have the ability and resources to perform their responsibilities, including assessing and promoting implementation of these recommendations. They should cooperate with each other and with other relevant authorities.	A clear legal basis for the Federal Reserve Board's supervision of FSS exists. However, it is based on its banking supervisory responsibility rather than a legal responsibility for clearing and settlement.
19. CSDs that establish links to settle cross-border trades should design and operate such links to reduce effectively the risks associated with cross-border settlement.	No cross-border link is in place because foreign CSDs without a legal presence in the United States and a banking license are not allowed to open accounts at the Fed. The Fed does not monitor the functioning of indirect links, where major custodians are involved in cross-border transfers of FSS eligible securities between FSS and foreign CSDs. The RSSS assessment methodology, however, does not provide clear indications on how assessment of indirect links should be conducted.

Table 3. Recommended Action plan to Improve Observance of CPSS-IOSCO Recommendations

Reference Recommendation	Recommended Action
Recommendation 2:Trade confirmation	The FSS should explore the possibility of introducing an instructions matching mechanism prior to settlement.
Recommendation 3: Settlement cycles	MBS should be settled no later than T+3.
Recommendation 9: Risk controls	In view of eliminating the residual risk taken by the Fed when executing DVP whose cash leg is funded by Fed using uncollateralized intraday credit, the Fed should continue to monitor these risks and assess whether additional mitigation tools such as collateral is needed.
Recommendation 13: Governance	In order to ensure that the needs and interests of different kinds of participants are taken into account, the WPO should include representatives of smaller and midsize participants in its advisory group.
Recommendation 14: Assess	The Federal Reserve should be given the legal authority to ope accounts and provide services, at a minimum, for other paymer clearing and settlement infrastructures.
Recommendation 15: Efficiency	The Fed should re-assess the operating hours of FSS.
Recommendation 16: Communication	International standards could become relevant should remote access of other infrastructure be allowed. In general terms, global co-operation calls for adoption of (or compatibility with) common global standards for major infrastructures at the global level.
Recommendation 18 : Regulation and oversight	The Fed should be provided the legal basis to oversee systemically important payment, clearing, and settlement infrastructures.
Recommendation 19 : Cross-border links	Fed should consider monitoring the functioning of indirect links, where major custodians are involved in cross-border transfers of FSS eligible securities between FSS and foreign CSDs.

IV. AUTHORITIES' RESPONSE TO THE ASSESSMENT

12. The U.S. authorities strongly support the FSAP program, welcome this independent review, and thank the assessors for all the work to produce this report. They appreciate the significant undertaking associated with a review of the biggest financial sector in the world, as well as the challenges that accompany the first assessment of a large advanced country in the wake of the crisis.

13. The authorities are pleased to note the assessment reflects the high degree of compliance of the Fedwire securities service with the RSSSs, and are largely in agreement with the assessment's comments and recommendations. The authorities will explore the possibility of introducing settlement instruction matching in the Fedwire securities service, taking into account the relevant costs and benefits associated with such a matching feature.

The authorities will also reassess the business case for extending FSS service operating hours and seek ways to ensure that the needs and interests of smaller and midsize participants continue to be taken into account.

14. The assessment also recommends that a rolling settlement period of no later than T+3 be adopted in the U.S. mortgage-backed securities (MBS) market. While the authorities agree in principle that reducing the settlement period reduces settlement risk, they note that such a change for the U.S. MBS market requires careful study and close consultation with market participants given the characteristics of the instruments being settled, existing trading practices, and significant operational changes that are likely to be needed. The U.S. authorities believe that near-term risk reduction efforts should focus on the industry proposal to implement a central counterparty for mortgage-backed securities.

15. With regard to the recommendation concerning residual risks associated with the provision of intraday credit to participants in the Fedwire securities service, the authorities note that a rigorous program for assessing, monitoring, and mitigating the risks associated with the provision of intraday credit to Fedwire accountholders is in place. Nevertheless, the authorities are further strengthening this program as a result of a comprehensive policy review conducted from 2006 to 2008 and the planned implementation of an explicit collateralization policy in late 2010 or early 2011. As a result, the authorities are confident that the residual risks noted in the assessment are adequately monitored and controlled.