SENIOR SUPERVISORS GROUP

Self-Assessment Template

A Supplement to

Risk Management Lessons from the Global Banking Crisis of 2008

October 21, 2009

SELF-ASSESSMENT TEMPLATE

INTRODUCTION

In November 2008, the Senior Supervisors Group (SSG) asked twenty firms to conduct self-assessments by benchmarking their current risk management practices against recommendations and observations of five industry and supervisory studies published earlier that year.

The firms' self-assessments contributed significantly to the major themes and conclusions of the SSG report *Risk Management Lessons from the Global Banking Crisis of 2008*, published in October 2009.

The SSG created a template for firms to use in the self-assessment exercise. The template, included here as a supplement to the October 2009 report, is a compilation of the recommendations and observations from the 2008 studies, organized by theme and clustered by sub-theme, to create thirty-two assessment topics. The source of each recommendation and observation is noted by the abbreviation and associated color code (see the Self-Assessment Key) of the industry group or supervisory agency that authored the relevant study. In places where the language is very similar to that of a recommendation or observation from a different source, we note the comparable report and section number.

The SSG Secretariat took care to streamline the supplement without losing the integrity of the original language. Any departure from the original message of these studies is an unintended consequence of an effort to avoid repeating the same recommendation or observation.

The SSG is not endorsing the recommendations or observations in the studies by including them in the self-assessment, nor is it attempting to establish a new set of standards. This supplement to the *Risk Management Lessons from the Global Banking Crisis of 2008* serves solely to provide clarity and transparency concerning the self-assessment exercise.

Self-Assessment Template

Self-Assessment Key

Study	Group/Agency	Code
Observations on Risk Management Practices during the Recent Market Turbulence	Senior Supervisors Group	SSG
Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience	Financial Stability Forum	FSF
Final Report of the IIF Committee on Market Best Practices: Principles of Conduct and Best Practice Recommendations	Institute of International Finance	IIF
Containing Systemic Risk: The Road to Reform	Credit Risk Management Policy Group III	CRMPG
Policy Statement on Financial Market Developments*	President's Working Group on Financial Markets	PWG
	Multiple	

Note: AT is assessment topic.

* The recommendations in this study were included only in the template provided to U.S. firms.

I. Management of Risk

A. Governance

AT 1	Policies	IIF 1.1	Firms should establish clear policies that define risk management as the clear responsibility of each institution's senior management, in particular, the chief executive officer (CEO), subject to the oversight of the board of directors. Senior management should be involved in the risk-control process, and both the board and senior management should regard risk management and control as essential aspects of the business.
		IIF 1.7	Firms should establish clear policies so that control and audit functions are independent of organizations whose activities they review. Their responsibility is to provide assurance that line businesses and the risk management organization are complying with internal and regulatory policies, controls, and procedures concerning risk management.
AT 2	Roles and Responsibilities	IIF 1.2	Boards have an essential oversight role in risk management. In attending to this duty, each board should: • include members who have an adequate understanding of risk management. Each board should be given the means to understand the risk profile of the firm and the firm's performance against it; • consider, depending on the characteristics of the firm, whether there should be separate audit and risk committees and whether at least some members of the risk committee (or equivalent) should be individuals with technical financial sophistication in risk disciplines; • set basic goals for the firm's risk appetite and strategy, such as rating or earnings-volatility targets, with senior management and as guideposts for senior management in implementing risk management policies throughout the firm; and • review with senior management how the firm's strategy is evolving over time and when and to what extent the firm is deviating from the strategy (for example, when a strategy resulted in heavy dependence on conduits or on structured products).
		IIF 1.3	Risk management should be a priority for the whole firm and not be focused only on particular business areas or made a purely quantitative oversight process or an audit/control function. Mutually reinforcing roles within each organization are essential to creating a strong, pervasive risk culture.
		IIF 1.4	Risk management should be a key responsibility of the entire business-line management, not just those businesses that invest the capital of the firm on a proprietary basis.
		IIF 1.5	All employees in each organization should have a clear understanding of their responsibilities in regard to the management of risks assumed by the firm and should be held accountable for their performance with respect to these responsibilities.
		IIF 1.6	Firms should implement controls to ensure that the governance structure that has been adopted is actually implemented in managing the day-to-day business. The regular and predictable functioning of risk management and governance structures is a fundamental element of effective risk management.
		IIF I.25	Risk management personnel should possess sufficient experience, qualifications, and status to exercise control responsibilities. Credibility requires market and product knowledge as well as mastery of risk disciplines. In addition, firms should consider establishing some (bi-directional) career crossover between risk and line roles. Doing so will contribute directly to improving mutual understanding and to strengthening the risk management function.
		IIF IV.14	Firms should ensure that there is a process to highlight accounting policy decisions for management consideration; this process should include developing an understanding within the firm of the impacts of accounting requirements and accounting policy on the valuation process.
		SSG III A	It was critical for firms to have risk management functions that are not only independent but also have sufficient authority within the organization.

Self-Assessment Template (*Continued*)

I. Management of Risk

A. Governance (*Continued*)

AT 2	Roles and Responsibilities (*Continued*)	PWG III D 1	Global financial institutions should promptly identify and address any weaknesses in risk management practices that the turmoil has revealed.
AT 3	Internal Coordination and Communication	CRMPG III IV-2a	The Policy Group (CRMPG) recommends that all large integrated financial intermediaries evaluate the manner in which information relating to risk taking, risk monitoring, and risk management is shared with senior management and the boards of directors and make necessary improvements to ensure that such information flows are timely, understandable, and properly presented. As a part of this effort, senior management should actively encourage ongoing discussion with board members in order to improve the quality, coverage, and utility of information made available to the board. Each institution should evaluate how effective its information flows are as they relate to the intersection of credit, market, operational, and liquidity risk.
		CRMPG III IV-2d	The Policy Group recommends that each institution review its internal systems of both formal and informal communication across business units and control functions to ensure that such communication systems encourage the prompt and coherent flow of risk-related information within and across business units and, as needed, the prompt escalation of quality information to top management.
		IIF I.8	The finance and treasury functions should operate in a coordinated and cohesive manner with the risk management function to ensure important checks and balances. (Comparable to SSG III D.)
		SSG III D	Firms should provide an effective forum in which senior business managers and risk managers can meet to discuss emerging issues frequently; senior management should signal its commitment to such dialogue.
AT 4	Risk Committee	SSG III A	Recent events suggest that firms are more likely to maintain a risk profile consistent with the board of directors' and senior management's tolerance if firms establish risk management committees that discuss all significant risk exposures across the firm (promoting a firm-wide approach to risk management), meet on a frequent basis, and include executive and senior leaders from key business lines and independent risk managers and control functions as equal partners.
		CRMPG III IV-3a	The Policy Group recommends that, when schedules permit, the chief executive officer and the second-ranking officers of all large integrated financial intermediaries should frequently attend and participate in meetings of risk-management–related committees.
		CRMPG III IV-3b	The Policy Group recommends that the highest levels of management periodically review the functioning of the committee structure to ensure, among other things, that such committees are appropriately chaired and staffed and there is an appropriate overlap of key business leaders, support leaders, and enterprise executives across committees to help foster firm-wide cooperation and communication.
AT 5	Risk Appetite	IIF I.9	The board of directors should review and periodically affirm the firm's risk appetite as proposed by senior management. In so doing, the board should assure itself that management has comprehensively considered the firm's risks and has applied appropriate processes and resources to manage those risks. (Comparable to CRMPG III IV-2b.)
		IIF I.10	When defining its risk appetite, the firm should be able to demonstrate consideration of all relevant risks, including noncontractual, contingent, and off-balance-sheet risks; reputational risks; counterparty risks; and other risks arising from the firm's relationship to off-balance-sheet vehicles (see the "Conduits and Liquidity" section of IIF).
		IIF I.11	A firm's risk appetite will contain both qualitative and quantitative elements. Its quantitative elements should be precisely identified. Clearly defined qualitative elements should help the board of directors and senior management assess the firm's current risk level relative to risk appetite, as adopted. Further, by expressing various elements of the risk appetite quantitatively, the board can assess whether the firm has performed in line with its stated risk appetite.
		IIF I.12	Risk appetite should be the basis on which risk limits are established. Limits need to cascade down from the firm-wide level to business lines and divisions, to regions, and to trading desks. Risk-appetite usage should be measured on a global consolidated basis and constantly monitored against the limits.
		IIF I.13	The firm's risk appetite should be connected to its overall business strategy (including assessment of business opportunities) and capital plan. It should dynamically consider the firm's current capital position, earnings plan, and ability to handle the range of results that may occur in an uncertain economic environment. It is fundamental, therefore, that the appetite be grounded in the firm's financials. The appropriateness of the risk appetite should be monitored and evaluated by the firm on an ongoing basis.

Self-Assessment Template (*Continued*)

I. Management of Risk

A. Governance (*Continued*)

AT 5	Risk Appetite (*Continued*)	SSG III. A	Firms that experienced material unexpected losses in relevant business lines typically appeared to have been under pressure over the short term either to expand the business aggressively to a point beyond the capacity of the relevant control infrastructure, or to defend a market leadership position. In some cases, concerns about the firm's reputation in the marketplace may have motivated aggressive managerial decisions in the months prior to the turmoil.
		IIF I.14	Firms should involve the risk management function from the beginning of the business planning process to test how growth or revenue targets fit with the firm's risk appetite and to assess potential downsides. There should be clear communication throughout the firm of the firm's risk appetite and risk position.
		CRMPG III IV-2c	The Policy Group recommends that large integrated financial intermediaries ensure that their treasury and risk management functions work with each other and with business units to manage balance sheet size and composition in a manner that ensures that the established risk tolerance is consistent with funding capabilities and ongoing efforts to manage liquidity risk.
AT 6	Incentives and Compensation	CRMPG III IV-1a	The Policy Group recommends that, from time to time, all large integrated financial intermediaries must examine their framework of corporate governance in order to ensure that it is fostering the incentives that will properly balance commercial success and disciplined behavior over the cycle while ensuring the true decision-making independence of key control personnel from business units.
		CRMPG III IV-12a	The Policy Group recommends that large integrated financial intermediaries ensure that a review of the systemic risk implications of incentives and consequent remedial actions is an integral component of each firm's risk management practices.
		SSG III. A	An issue for a number of firms is whether compensation and other incentives have been sufficiently well designed to achieve an appropriate balance between risk appetite and risk controls, between short-run and longer run performance, and between individual or local business units and firm-wide objectives.
		IIF. II Principles of Conduct	Compensation incentives should be based on performance and should be aligned with shareholder interests and long-term, firm-wide profitability, taking into account overall risk and the cost of capital. Compensation incentives should not induce risk taking in excess of the firm's risk appetite. Payout of compensation incentives should be based on risk-adjusted and cost-of-capital–adjusted profit and phased, where possible, to coincide with the risk time horizon of such profit. Incentive compensation should have a component reflecting the impact of business units' returns on the overall value of related business groups and the organization as a whole. Incentive compensation should have a component reflecting the firm's overall results and achievement of risk management and other general goals. Severance pay should take into account realized performance for shareholders over time. The approach, principles, and objectives of compensation incentives should be transparent to stakeholders.
AT 7	Role of the Chief Risk Officer	CRMPG III IV-1a	The Policy Group recommends that risk management and other critical control functions be positioned within all large integrated financial intermediaries in a way that ensures that their actions and decisions are appropriately independent of the income-producing business units and includes joint approval of key products and transactions. This would generally mean having a chief risk officer (CRO) with a direct line of responsibility to the CEO and having the CEO and the board take a highly active role in ensuring that the culture of the organization as a whole recognizes and embraces the independence of its critical control functions. Even without the direct reporting, the CRO should have a clear line of communication to the board. (Comparable to IIF I.15, I.16.)
		IIF I.17	While firms retain freedom to determine their internal structures, firms should strongly consider having the CRO report directly to the CEO and assign the CRO a seat on the management committee. The CRO should be engaged directly on a regular basis with a risk committee of the board of directors. Regular reporting to the full board to review risk issues and exposures is generally advisable, as well as more frequent reporting to the risk committee.
		IIF I.18	Chief risk officers should have a mandate to bring to the attention of both line and senior management or the board of directors, as appropriate, any situation that is of concern from a risk management perspective or that could materially violate any risk-appetite guidelines.
		IIF I.19	Firms should define the role of the CRO in such a way that, without compromising his or her independence, he or she is in frequent interaction with the business lines so that the CRO and all risk managers have sufficient access to business information.

Self-Assessment Template (*Continued*)

I. Management of Risk

A. Governance (*Continued*)

AT 7	Role of the Chief Risk Officer (*Continued*)	IIF I.20	Firms should consider assigning the following key responsibilities to the chief risk officer: • guiding senior management in their risk management responsibilities; • bringing a particularly risk-focused viewpoint to strategic planning and other activities of senior management; • overseeing the risk management organization; • assessing and communicating the institution's current risk level and outlook; • strengthening systems, policies, processes, and measurement tools as needed to provide robust underpinnings for risk management; • ensuring that the firm's risk levels and business processes are consistent with the firm's risk appetite, internal risk policies, and regulatory requirements for risk management; and • identifying developing risks, concentrations, and other situations that need to be studied through stress testing or other techniques.
		IIF I.21	The CRO should report to senior management and, as appropriate, to the board of directors or its risk committee, on material concentrations as they develop, discuss material market imbalances, and assess their potential impact on the firm's risk appetite and strategy. The CRO should ensure a thoughtful, integrated view of the overall risks faced by the firm (including related off-balance-sheet vehicles). At a more technical level, the risk management function should oversee internal risk-rating systems, segmentation systems, and models, and ensure that they are adequately controlled and validated. Assumptions behind models, grading systems, and other components of quantification should be recognized, and appropriate updates should be made when assumptions no longer hold.
		IIF I.22	The CRO and risk management function should be a key part of analyzing the development and introduction of new products, including the extension of products into new markets. New products with risk exposure, including those for which the bank accepts contingent liquidity or credit exposure, should be explicitly approved by the risk organization.
AT 8	Resources	IIF I.24	During the planning and budgeting process, firms should ensure that adequate resources include personnel, data systems, and support and access to the internal and external information necessary to assess risk. It is important that the allocation of resources be made under careful cost/benefit considerations as well in proportionality to the firm's size and mix of business.
		IIF I.23	Firms should ensure that the risk management function has a sufficient amount and quality of resources to fulfill its roles. Senior management should be directly responsible for this, under the oversight of the board of directors. (Comparable to CRMPG III IV-1b.)
		CRMPG III IV-4a	The Policy Group recommends that sustained investment in risk management systems and processes, and the careful calibration of such investment to business opportunities being pursued, be a key area of focus for a firm's senior management team.
		CRMPG III IV-4b	The Policy Group recommends that each firm's CRO commission a periodic review and assessment of the firm's investments in risk management for presentation to its senior management and the audit committee of its board of directors.

B. Identification and Measurement

AT 9	Scope and Procedures	SSG V.B-8	Successful firms had in place granular profit-and-loss reporting systems, which were often used in conjunction with risk management tools subject to regular senior management review.
		IIF I.26	Risk managers should manage and measure risks on the basis of the firms' approved risk parameters, in addition to any regulatory requirements. External ratings of transactions should not be a substitute for a firm's own due diligence processes, especially because such ratings may not address the firm's specific issues or not be calibrated to the firm's standards and risk management goals.
		IIF I.28	Firms should improve, where needed, their approaches to portfolio-level risk management. The identification of the key risk factors and associated risk measures for a specific portfolio allows for the potential impact of changes in market fundamentals to be assessed, thereby facilitating effective risk management.
		IIF I.33	Firms should implement a comprehensive approach to risk, establishing procedures and techniques that adequately integrate different risk strands (in particular, credit, market, operational, liquidity, and reputational risk). Effective communication channels, as well as common metrics and IT systems, should be put in place in order to achieve a sufficient degree of integration of the different risk areas.

Self-Assessment Template (*Continued*)

I. Management of Risk

B. Identification and Measurement (*Continued*)

AT 9	Scope and Procedures (*Continued*)	CRMPG III IV-7c	The Policy Group recommends that credit risks be viewed in aggregate across exposures, giving full consideration to the effects of correlations between exposures. Further, counterparty credit risks, including correlations and directionality, should be evaluated based not only on positions within a large integrated financial intermediary, but also considering available data regarding the size and direction of positions the counterparty has at other firms.
		IIF I.29	Firms should implement procedures so that portfolio information is designed and organized in a way to facilitate aggregation of a soundly based, firm-wide view of all risks, including concentrations.
AT 10	Metrics	SSG V.B	Most firms that avoided significant unexpected losses used a wide range of risk measures to discuss and challenge views on credit and market risk broadly across business lines in a disciplined fashion. Some firms gave particularly thorough consideration to the interplay of market sensitivities to derivatives exposures (the "greeks"), notional limits, value-at-risk, static single factor stress tests, and historical and forward-looking scenario analysis.
		IIF I.30	Metrics should be calibrated closely to risk-appetite horizons. It may not be sufficient to rely on short-term VaR and long-term economic capital, but metrics at other intervals may be necessary depending on the firm's business.
		IIF I.31	Widely recognized weaknesses in VaR, such as dependence on historical data and inadequate volatility estimates, should be explicitly addressed by firms when revising and adapting their VaR methodologies. Back testing and stress testing provide powerful tools to identify VaR shortcomings and offset deficiencies.
		CRMPG III IV-7a	The Policy Group recommends that large integrated financial intermediaries' risk analytics incorporate sufficient granularity to reveal less obvious risks that can occur infrequently but that may potentially have a significant impact (for example, basis risks between single name underliers and index hedges). However, risk management professionals and senior management must recognize the limitations of mathematical models, and that the tendency to overly formalize arcane aspects of an analysis can often detract from an understanding of the bigger picture implications of the total risk position. Incremental analytical detail must not be allowed to overwhelm users of the data. The salient risk points must be drawn out and made apparent, especially to senior management. Adequate time and attention by senior management must also be allotted to socializing the implications of the risk data. (Comparable to IIF I.32.)
		CRMPG III IV-7b	The Policy Group recommends that large integrated financial intermediaries ensure that assumptions underlying portfolio analyses are clearly articulated and subject to frequent, comprehensive review. Alternative measures should be presented to demonstrate the sensitivity of the calculated metrics to changes in underlying assumptions.
		CRMPG III IV-7d	The Policy Group recommends that large integrated financial intermediaries work to supplement VaR as the dominant risk measure of market risk and current exposure as the dominant risk measure for credit risk, both for public reporting and for risk discussion purposes. Supplemental measures should include statistical information intended to display the most likely ways a large integrated financial intermediary or a managed portfolio could sustain significant losses, as well as an indication of the potential size of those losses.
AT 11	Monitoring	CRMPG III Precept II	The Policy Group recommends that all large integrated financial intermediaries must have, or be developing, the capacity (1) to monitor risk concentrations to asset classes as well as estimated exposures, both gross and net, to all institutional counterparties in a matter of hours and (2) to provide effective and coherent reports to senior management regarding such exposures to high-risk counterparties.
		CRMPG III Precept IV	The Policy Group recommends that all large integrated financial intermediaries must engage in a periodic process of systemic "brainstorming" aimed at identifying potential contagion "hot spots" and analyzing how such "hot spots" might play out in the future. The point of the exercise, of course, is that even if the "hot spots" do not materialize or even if unanticipated "hot spots" do not materialize, the insights gained in the brainstorming exercise will be of considerable value in managing future sources of contagion risk.

Self-Assessment Template (*Continued*)

I. Management of Risk

B. Identification and Measurement (*Continued*)

AT 12	New Products	CRMPG III IV-3c	The Policy Group recommends that for certain classes of firm-wide committees, such as those responsible for the approval of new products—especially new products having high financial, operational, or reputational risks—the committee oversight process should include a systematic post-approval review process. This post-approval review process would assess the extent to which new products have, in commercial terms, performed as expected. Equally important, the process would assess whether the risk characteristics of the new product have been consistent with expectations, including the burden of the new products on technology and operating systems. Further, it is particularly appropriate to review at the earliest opportunity outsized profitability and market share gains to ensure that they do not reflect a problem with the original pricing or risk assessment of the product.
		CRMPG III IV-12b	The Policy Group recommends that, when considering new trade structures, strategies, or other opportunities, senior management of large integrated financial intermediaries evaluate systemic risk implications. Trades or structures that materially add to systemic risk should be subject to particular scrutiny.
		IIF I.34	Firms should develop, as needed, an integrated treatment of risk in the new-product process. Such an approach should include periodic review of new products. Firms should consider that migration of underlying assets or other relatively subtle changes in a product over time can affect the risk implications of a product or business.
AT 13	Concentration Risk	IIF I.41	Risk concentrations should be adequately identified and managed by all firms. An integrated approach to risk across the firm is fundamental so that all sources of risk (including on- and off-balance-sheet risks, contractual and noncontractual risks, and contingent and noncontingent risks, and including underwriting, and pipeline risks) will be effectively captured. Models and procedures should be implemented in such a way that they will be able to capture concentrations of risk to individual obligors, risk factors, industries, geographic regions, and counterparties (including financial guarantors). Firms should also consider risk concentrations in global markets and how they may affect individual firms (for example, by increasing asset volatility or reducing available liquidity).
		IIF I.42	Firms should explicitly take into consideration, when defining their risk appetites and associated limits, the prevention of undue risk concentrations. Limits can play a fundamental role in preventing a firm from building risk concentrations.
		IIF I.43	Risk metrics should include, when appropriate, a notional and asset-class view, recognizing that absolute size of position is important and a consolidated view of positions is essential if held by different trading desks or business units.
		SSG V-D	Firms that avoided substantial losses at certain points in the financial turmoil made the decision to implement hedges based on their consolidated risk position across businesses and in light of a wide range of available qualitative and quantitative risk information available. As a result of lessons learned during the financial turmoil, risk managers at several firms are rethinking their market-risk hedging practices. Among the issues under consideration are the degree of acceptable basis risk and its measurement, the absolute notional size of hedges and underlying positions, and the likely performance of hedges during severe market movements.
		IIF I.44	Firms should develop and continue to refine stress-testing methodologies that adequately deal with risk concentrations.

C. Counterparty Risk

AT 14	Close-Out Practices	CRMPG III V-18	The Policy Group recommends that all large integrated financial intermediaries (for example, the major dealers) should promptly adopt the close-out amount approach for early termination upon default in their counterparty relationships with each other. The Policy Group notes that this can be agreed and suitably documented without making any other changes to the International Swaps and Derivatives Association (ISDA) Master. The Policy Group expects that these arrangements will be in place in the very near term.
		CRMPG III V-20	The Policy Group recommends that all major market participants should periodically conduct hypothetical simulations of close-out situations, including a comprehensive review of key documentation, identification of legal risks and issues, establishing the speed and accuracy with which comprehensive counterparty exposure data and net cash outflows can be compiled, and ascertaining the sequencing of critical tasks and decision-making responsibilities associated with events leading up to and including the execution of a close-out event.

Self-Assessment Template (*Continued*)

I. Management of Risk

C. Counterparty Risk (*Continued*)

AT 14	Close-Out Practices (*Continued*)		CRMPG III V-21	The Policy Group recommends that all market participants should both promptly and periodically review their existing documentation covering counterparty terminations and ensure that they have in place appropriate and current agreements, including the definition of events of default and the termination methodology that will be used. Where such documents are not current, market participants should take immediate steps to update them. Moreover, each market participant should make explicit judgments about the risks of trading with counterparties who are unwilling or unable to maintain appropriate and current documentation and procedures.
AT 15	Risk Monitoring and Mitigation		CRMPG III IV-6a	The Policy Group recommends that large integrated financial intermediaries ensure that their credit systems are adequate to compile detailed exposures to each of their institutional counterparties on an end-of-day basis by the opening of business the subsequent morning. In addition, the Policy Group recommends that large integrated financial intermediaries ensure their credit systems are capable of compiling, on an ad hoc basis and within a matter of hours, detailed and accurate estimates of market and credit risk exposure data across all counterparties and the risk parameters set out below. Within a slightly longer timeframe, this information should be expandable to include: (1) the directionality of the portfolio and of individual trades; (2) the incorporation of additional risk types, including contingent exposures and second and third order exposures (for example, structured investment vehicles [SIVs] and asset-backed securities [ABS]); and (3) such other information as would be required to optimally manage risk exposures to a troubled counterparty. Large integrated financial intermediaries should be able to use exposure aggregation data both prospectively to avoid undue concentrations and, if necessary, in real time to react to unanticipated counterparty credit events.
			CRMPG III IV-6b	To demonstrate compliance with the aforementioned standards, the Policy Group recommends that firms conduct periodic exercises for both individual and multiple institutional counterparties, and, to the extent that deficiencies are observed, develop remediation plans as a matter of urgency.
			CRMPG III IV-9a	The Policy Group recommends that large integrated financial intermediaries adjust quantitative measures of potential credit risk with margined counterparties to take into account exceptionally large positions as well as position concentrations in less liquid instruments. The adjustment should anticipate potentially protracted unwind periods and the risk of price gapping during unwinds.
			CRMPG III IV-9b	The Policy Group further recommends that consideration be given to collecting higher initial margins and higher haircuts from counterparties with outsized positions relative to market liquidity. Large integrated financial intermediaries should also evaluate the need to adjust internal pricing for large positions.
			CRMPG III IV-10a	The Policy Group recommends that large integrated financial intermediaries ensure that they employ robust, consistent pricing policies and procedures, incorporating disciplined price verification for both proprietary and counterparty risk trades. Special attention should be given to bespoke trades, structured products, illiquid products, and other difficult-to-price assets. A robust monitoring process should be employed to track stale prices and elevate unresolved issues.
			CRMPG III IV-10b	The Policy Group recommends that firms and industry groups promote standardized and strengthened dispute resolution mechanisms and encourage the application of higher levels of resources to position pricing. Firms should also promote enhanced understanding of the need for cooperative behavior among firms (for example, when requested to provide indicative bids).
			SSG V. F	The rapid growth of current exposures, in excess of prior estimates of potential future exposure, highlights the reliance of measures of potential future exposure on historical volatility measures and illustrates the need to augment those measures with other approaches, such as scenario analysis or stress testing. In turn, such scenarios or stress tests should be designed to consider the vulnerabilities of hedges (that is, credit quality of counterparties providing them), as in the case of hedges purchased from, or referencing, financial guarantors.

D. Liquidity Risk

AT 16	Funding and Reserve Management		IIF III.2	Firms should mandate that assets held to back their liquidity positions need to be dimensioned in relation to the anticipated liquidity and currency denomination of such assets and with respect to the reasonably anticipated depth and sustainability of the money markets and capital markets. Portfolios held for such purposes should be well diversified by type of instrument and counterparty. The assessment of assets held primarily for liquidity purposes should not be established solely on the basis of credit ratings. Reporting should keep senior management and relevant control functions apprised of risks associated with assets held for liquidity purposes.

Self-Assessment Template (*Continued*)

I. Management of Risk

D. Liquidity Risk (*Continued*)

AT 16	Funding and Reserve Management (*Continued*)	IIF III.5	Firms should ensure access to diversified funding sources (for example, funding providers, products, regions, currencies) to avoid the risk of overdependence on any form of funding. This includes access to securities and secured financing markets, in their day-to-day liquidity risk management, and for stress testing and contingency planning purposes. Firms should periodically reevaluate the appropriateness of the metrics employed and use a variety of firm-specific and market-related events in carrying out this analysis. Market-sensitivity analyses encompassing such items as the effects of contingent drains on liquidity and the adequate pricing of such facilities are important.
		SSG IV	Individual business lines should be encouraged to assess and communicate their likely needs for funding to the treasury function, and to price those internal claims on liquidity appropriately in light of actual market conditions.
		CRMPG III IV-10c	The Policy Group recommends that increased emphasis be given to using, wherever possible, transparent and liquid instruments rather than bespoke products. To incentivize this conduct, large integrated financial intermediaries should consider imposing internal charges against the profit and loss of hard-to-value and illiquid transactions, or other methods, such as higher capital charges, higher haircuts to collateralized borrowers, and the imposition of limits on allowed trade volumes. The recommendations incorporated in the section on high-risk complex financial instruments regarding documents and disclosure are of particular relevance to bespoke products.
		CRMPG III IV-14	The Policy Group recommends that all large integrated financial intermediaries should maintain, on an ongoing basis, an unencumbered liquidity reserve of cash and the highest grade and most liquid securities. The liquidity reserve should be sized in relation to the firm's stress tests and "maximum liquidity outflow" and should explicitly reflect the firm's liquidity risk tolerance and desired survival periods.
		CRMPG III IV-15	The Policy Group recommends that all large integrated financial intermediaries maintain long-term structural liquidity in excess of their illiquid assets. In making this assessment, large integrated financial intermediaries should analyze the term structure of their long-term liabilities, the long-term stable portion of their deposits (where applicable), as well as equity capital. Illiquid assets should include those assets that cannot be converted to cash within a specified horizon and potential growth of those assets, as well as the haircuts necessary to convert generally liquid assets to cash through sale, securitization, or secured financing. The baseline assessment of whether a large integrated financial intermediary has long-term structural liquidity in excess of its illiquid assets should reflect current business conditions. However, the amount of this excess ("the cushion") should reflect an evaluation of the assets and liabilities under stressed conditions. This cushion should be replenished with structured long-term liabilities, with tenors appropriate to market conditions, business strategy, and existing debt maturities.
		CRMPG III IV-16	The Policy Group recommends that a firm's liquidity plan and any stress tests mentioned above include, in all instances, the full set of on- and off-balance-sheet obligations. In addition, they must reflect a clear view of how the firm will address noncontractual obligations that have significant franchise implications. While some noncontractual obligations may not lend themselves to incorporation into the core stress scenarios, an evaluation of how such exposures will play out in different market environments should be an overlay to the core stress scenarios. In addition, a clear assessment of how practices in relevant markets (for example, structured investment vehicles and auction rate securities) will affect an individual firm's conduct should be directly factored into liquidity planning. The above liquidity exposures should be fully priced under the firm's transfer pricing policies (see Recommendation V-17 in CRMPG).
		CRMPG III IV-18	The Policy Group recommends that to manage, monitor, and control funding liquidity risk, treasury officials in particular need to be included in an enterprise-wide risk management process with appropriate channels of communication. The evaluation of the interconnected elements of these risks requires seamless communication across all risk disciplines, as well as between risk management functions, treasury, and the underlying businesses. All integrated financial services firms should hold regularly scheduled meetings of an oversight committee represented by the above disciplines to monitor the firm's liquidity positions.
		CRMPG III IV-19	The Policy Group recommends that firms explicitly coordinate across their liquidity and capital planning processes and, at a minimum, ensure that critical information flows between the two processes. Executive management must have the capacity to evaluate and incorporate the highly integrated nature of the two disciplines into its planning activities.

Self-Assessment Template (*Continued*)

I. Management of Risk

D. Liquidity Risk (*Continued*)

AT 17	Monitoring and Planning	IIF III.1	Firms should ensure implementation of sound industry practice for liquidity risk management through a continuous review and critical assessment process as appropriate for their business, using the Revised and Restated Recommendations set out in Appendix B and in the body of this report [the *Final Report of the IIF Committee on Market Best Practices*] as benchmarks.
		IIF III.3	Firms should ensure that reporting to the appropriate committees (for example, asset and liquidity committee, credit committee) disaggregates between direct and indirect risks relating to securitizations, so that information on gross as well as net possible positions is available, in order to ensure full transparency within the firm. At the same time, reporting should aggregate liquidity risks on a firm-wide basis, including on- and off-balance-sheet transactions.
		SSG IV. A	Risks related to off-balance-sheet obligations should be monitored and incorporated into the contingency funding plan.
		SSG IV. B	Firms should utilize flexible funding liquidity management tools, including those that lack built-in assumptions and therefore help firms to more easily understand the impact of unanticipated and evolving market events.
		SSG IV. C	Contingency funding plans should consider the need to balance funding liquidity management with business decisions required to maintain the firm's reputation and market position, as well as key business relationships.
		SSG IV. C	Contingency funding plans should take into account lessons learned from the current crisis in terms of nature, severity, and duration of scenarios and assumptions about asset market liquidity, balance sheet growth, and ability to obtain funding in major currencies.
AT 18	Transfer Pricing	IIF III.4	Firms should ensure that they have in place effective internal transfer pricing policies to reflect implied or incurred actual or potential costs related to reasonably anticipated liquidity demands from both on- and off-balance-sheet business. Transfer pricing should closely take into account the liquidity of relevant underlying assets, the structure of underlying liabilities, and any legal or reasonably anticipated reputational contingent liquidity risk exposures. Transfer pricing should be designed to ensure that lines of business within the firm that create liquidity exposures are proportionately charged for the cost to the firm of maintaining corresponding prudent liquidity positions.
		CRMPG III IV-17	The Policy Group recommends that all large integrated financial intermediaries incorporate appropriate pricing-based incentives for the full spectrum of their funding activities. This includes a funds transfer pricing policy that assigns the cost of funding to businesses that use funding and credits the benefits of funding to businesses that provide it. This must encompass both on- and off-balance-sheet activities (for example, contingent funding), as well as potential funding needs related to actions that might be taken to preserve the institution's reputation. The funds transfer pricing process should be informed by stress-testing efforts that identify potential vulnerabilities and assign the related costs to the businesses that create them. The methodology should provide direct economic incentives factoring in the related liquidity value of assets and behavioral patterns of liabilities. The costs and benefits identified should be assigned to specific businesses and, under all circumstances, used in evaluating the businesses' performance.

E. Market Risk

AT 19	Valuations: Oversight, Accountability, Policies, and Procedures	IIF IV.1	Traders, desk heads, and heads of business all should be accountable for and sign off on proposed valuations to ensure the business takes primary responsibility for appropriate valuation, subject to proper review and governance as outlined in Recommendations IV.2-IV.8.
		IIF IV.2	Firms should ensure consistent application of independent and rigorous valuation practices.
		IIF IV.3	Firms should apply appropriate expert judgment and discipline in valuing complex or illiquid instruments, making use of all available modeling techniques and external and internal inputs such as consensus-pricing services while recognizing and managing their limitations.
		IIF IV.4	For assets that are measured at fair value on a basis related to intended use rather than their actual current status (for example, whole loans in a warehouse or pipeline that are likely to be distributed or securitized and are measured as a pool), there should be additional internal monitoring of the valuations at which they could be disposed of in their current form if securitization is not carried out.
		IIF IV.5	The firm's governance framework around valuation processes should integrate input from risk management, finance, and accounting policy to ensure proper product and risk control. The process should include senior management involvement.

Self-Assessment Template (*Continued*)

I. Management of Risk

E. Market Risk (*Continued*)

AT 19	Valuations: Oversight, Accountability, Policies, and Procedures (*Continued*)	IIF IV.6	Internal governance should ensure independence of these responsible for control and validation of valuations. This should be structured to ensure that valuation control groups are not too remote from market functions to understand developments or too close to the sales and trading functions as to compromise their independent posture.
		IIF IV.7	Relevant control functions within a firm should regularly review independent price verification procedures and sources and challenge their usage as appropriate. There should be clear procedures for resolution of disagreements about valuation issues and for escalation of material valuation issues to the audit or risk committee of the board of directors, when appropriate.
		IIF IV.8	There should be regular involvement of the CRO and/or chief financial officer (CFO, or equivalent positions) in considering valuation issues, including valuations of assets held by off-balance-sheet vehicles. Finance committees and the CFO should be aware of and consider valuation issues on a regular basis.
		IIF IV.9	Firms should ensure that new product and associated models and pricing approval processes are in place to ensure that new products, asset classes, and risk types are valued appropriately, given volumes and other operational risk factors.
		IIF IV.10	Firms should have business-as-usual model-review and price-verification organizational structures, processes, and policies in place.
		CRMPG III IV-11a	The Policy Group recommends that large integrated financial intermediaries ensure, in the absence of exceptional circumstances, that when the same instrument is held by different business units, such instrument is marked at the same price in each unit. Large integrated financial intermediaries should restrict those personnel and groups that are authorized to provide marks to internal and external audiences. Any differentials in pricing across applications or units should be carefully considered and the rationale for such differences should be fully documented. Notwithstanding the above, it is recognized that for large integrated financial intermediaries, there are communication walls that are designed to fulfill regulatory requirements for the restriction of information flows. In these instances, it is understood that legitimate differences in pricing may occur. (Comparable to IIF IV.11.)
		IIF IV.13	Firms should have a robust framework in place to oversee and ensure the integrity and consistency of accounting policy applied within the firm.
		IIF IV.17	Firms should have valuation procedures, with appropriate governance processes, in place for times of market stress, including ways to recognize and react when changes in market liquidity or volatility require changes in valuation approaches for individual assets.
		IIF IV.19	Firms should have adequate resources to accommodate the demands of producing valuations during a period of market disruption.
		SSG V.A	Firms should devote resources to establishing specialized product financial control staff able to perform a fundamental analysis of underlying positions and enforce discipline internally in marking their assets to their estimated prices. Firms should also factor position size (to account for the market impact of immediate sales of such size) and the dispersion of observed prices into their valuation models.
AT 20	Valuations: Metrics and Analysis	IIF IV.12	Valuations should be subject to sensitivity analysis to evaluate and inform the organization about the range of uncertainty and potential variability around point estimates.
		IIF IV.15	Firms should recognize that transaction prices may become dated and dealer quotes may not reflect prices at which transactions could occur, especially during periods of low liquidity. Firms should devote the analytical resources necessary to checking valuations made on such bases and make adjustments when deemed appropriate.
		IIF IV.16	Small- to medium-sized firms, given their limited resources, should develop at least internal benchmarking and not rely purely on dealer quotes for valuations.
		IIF IV.18	Firms should assess the infrastructure and price-testing implications of moving from observable market prices to other valuations techniques, including mark-to-model for material asset classes, and incorporate such implications in resource planning.
		IIF IV.20	For the purposes of regulatory capital, the process of evaluating whether an instrument should be placed in the trading or banking book should be subject to objective criteria and control procedures. Firms should provide clear explanations internally and to auditors as to why instruments were initially placed in the trading book or the banking book under prudential and accounting tests.

Self-Assessment Template (*Continued*)

I. Management of Risk

E. Market Risk (*Continued*)

AT 20	Valuations: Metrics and Analysis (*Continued*)	IIF IV.22	Firms should have appropriate controls over prices submitted to utilities to ensure not only that high-quality prices, consistent with the rules or requirements of each service, are submitted but also that the firm submits prices for as many material positions as possible when available.
		IIF IV.24	Where other valuation indications are less than satisfactory, firms may wish to consider using available information about valuations from collateral and repo experience.
		SSG V.A	Firms should take into account the challenges of pricing information from primary market transactions that may not indicate the true value of retained positions in the absence of secondary market trading. Firms should also not rely too heavily on rating agencies' assessments of complex securities, and pay sufficient attention to internal assessments and the quality of the underlying assets.
		SSG V.A	Firms should have processes in place to both verify and challenge business units' estimates of the value of their holdings. Some practices for price verification include requiring the trading desks to sell a sufficient portion of the exposure to observe a market price, and monitoring disputes over the market value of collateral value posted by counterparties to help mark firm holdings of the same of similar securities.
AT 21	Trading Patterns	IIF V.6	Firms should implement mechanisms for escalating potential conflicts or contradiction between their trading and placing strategies to an appropriate senior management body. Such body should be at a level with sufficient authority to adopt measures deemed necessary to resolve any such conflict, including change of sales or trading strategy, where appropriate. Clear policies also should be in place to determine when to disclose any such conflict to potential investors in a particular product.

F. Market Infrastructure

AT 22	Market Infrastructure	CRMPG III V-4	The Policy Group recommends incentives to buy-side participants. It is important to recognize that buy-side market participants will operate at different volumes. Moderate- to large-volume participants (more than four trades per month) will be expected to adhere to the same standards as dealer-side firms with respect to transmission standards, trade date confirmation, settlement, and mark-to-market comparisons. As with adoption of the Novation Protocol, dealers should consider limiting trading activity with firms that do not adhere to industry standards. Adherence to industry standards should be part of a routine dealer operational due diligence (side-by-side with the normal credit due diligence). Goal: Ongoing.
		CRMPG III V-5	The Policy Group recommends that market participants should seek to streamline their methods for trade execution and confirmation/affirmation, which should facilitate an end-to-end process flow consistent with same-day matching and legal confirmation.
		CRMPG III V-6	The Policy Group recommends that senior leaders of trading support functions should clearly articulate to senior management the resource requirements necessary to achieve the same-day standards. Recognizing the expense management imperatives driven by recent market conditions, senior management should make every effort to help support functions achieve these standards for the overarching benefit of enhancing market resilience. Goal: Ongoing.
		CRMPG III V-7	The Policy Group strongly urges that major market participants should deploy a combination of utility and vendor-supplied solutions and should, at a minimum, ensure interoperability of those solutions. Goal: End of 2009.
		CRMPG III V-8	The Policy Group recommends that major market participants on both the sell- and buy-sides should make every reasonable effort to speed up the adoption of electronic platform usage. This should entail revisiting the priorities in development and testing schedules. Goal: End of 2009.
		CRMPG III V-9	Consistent with Recommendation V-7 above, the Policy Group further recommends that major market participants on both the sell- and buy-sides should hasten their adoption of tools that facilitate standardization in the marketplace. This will in turn facilitate the achievement of the next-generation goals for the timeliness and integrity of transaction details. Goal: End of 2009.
		CRMPG III V-10	The Policy Group further recommends frequent portfolio reconciliations and mark-to-market comparisons, including on collateralized instruments. Goal: Weekly by the end of 2008, moving to daily for electronically eligible trades by mid-2009.

Self-Assessment Template (*Continued*)

I. Management of Risk

F. Market Infrastructure (*Continued*)

AT 22	Market Infrastructure (*Continued*)	CRMPG III V-12	The Policy Group recommends that, as mark-to-market disputes inevitably surface through the collateral portfolio reconciliation process, the information should be passed to the executing trading desks on a real-time basis to allow for research and resolution. This should, of course, be done with appropriate anonymity of the counterparty's identity, positions, and broader portfolio. A close alignment of the collateral team with trading desks—without violating the fire walls and controls that are critically important to the integrity of the financial system—would facilitate such information sharing. As necessary, significant and large-value collateral disputes should promptly be escalated to the appropriate senior officers. Goal: Immediate.
		CRMPG III V-14	The Policy Group recommends that market participants should actively engage in single-name and index collateralized default swap trade compression. ISDA has agreed on a mechanism to facilitate single-name trade compression with Creditex and Markit Partners. Established vendor platforms exist for termination of offsetting index trades, and the Policy Group urges major market participants to aggressively pursue their use.

G. Origination Standards

AT 23	Origination Standards	IIF V.1	Originators, sponsors, and underwriters should: • adopt and follow appropriate due diligence standard(s); • ensure that appropriate and relevant information is released in a timely manner; and • ensure that appropriate ongoing monitoring and disclosure of the performance of the underlying collateral are carried out.
		IIF V.2	Firms should subject assets that they help originate and distribute to the same credit due diligence standards as used for similar assets that are to be carried on the firm's own balance sheet. For third-party assets for which financial institutions act as sponsors, an appropriate due diligence process should be conducted. Alternately, firms should disclose reasons for not observing their usual credit due diligence process.
		CRMPG III III-4a-b	With respect to high-risk complex asset-backed securitizations, underwriters and placement agents should have in place an ongoing framework for evaluating the performance and reputation of issuers, as well as effective and clearly articulated procedures for evaluating the quality of assets. The Policy Group strongly urges that underwriters and placement agents redouble efforts to adhere fully to the letter and spirit of existing diligence standards, and seek opportunities to standardize and enhance such standards. These enhancements include the following recommendations: • III-4a. Requiring all firms to follow statistically valid sampling techniques in assessing the quality of assets in a securitization; and • III-4b. Encouraging disclosure to investors of due diligence results, including making the agreed-upon-procedures letter publicly available.
		IIF V.4	All originators of assets underlying securitized instruments, whether regulated as banks or not, should adhere to basic credit principles, such as making a reasonable assessment of a borrower's ability to pay; documentation should be commensurate with such basic requirements.
		IIF V.5	Basic credit principles need to be followed during negotiations between borrowers and lenders (including underwriters, sponsors, and other agents), and the risk implications of negotiated terms of lending transactions need to be analyzed carefully.
		CRMPG III IV-5b	The Policy Group recommends that each firm's senior management commission a periodic review of credit terms extended over a cycle, together with an assessment of the stability of such terms, for discussion with the firm's senior management.
		PWG III B 3	To limit rating shopping, underwriters and sponsors of structured finance products should publicly disclose whether—after submitting final data and information about a proposed structure to one or more credit rating agencies and receiving preliminary ratings from the agency(ies) based on the information—they choose to publish some but not all of the preliminary rating(s) as final ratings. The disclosure should include the reason for not having any such preliminary ratings published as final ratings.

Self-Assessment Template (*Continued*)

I. Management of Risk

H. Securitization and Complex Products

AT 24	Appropriate Investors	CRMPG III B	The Policy Group strongly recommends that high-risk complex financial instruments should be sold only to sophisticated investors.
		CRMPG III III-1	The Policy Group recommends establishing standards of sophistication for all market participants in high-risk complex financial instruments. In recommending specific characteristics and practices for participants, it is guided by the overriding principle that all participants should be capable of assessing and managing the risk of their positions in a manner consistent with their needs and objectives. All participants in the market for high-risk complex financial instruments should ensure that they possess the following characteristics and make reasonable efforts to determine that their counterparties possess them as well: • the capability to understand the risk and return characteristics of the specific type of financial instrument under consideration; • the capability, or access to the capability, to price and run stress tests on the instrument; • the governance procedures, technology, and internal controls necessary for trading and managing the risk of the instrument; • the financial resources sufficient to withstand potential losses associated with the instrument; and • authorization to invest in high-risk complex financial instruments from the highest level of management or, where relevant, from authorizing bodies for the particular counterparty. Large integrated financial intermediaries should adopt policies and procedures to identify when it would be appropriate to seek written confirmation that the counterparty possesses the aforementioned characteristics.
		IIF V.3	Firms should consider the general appropriateness of products for specific types of institutional investors. Sale processes within firms should be reviewed to ensure proper consideration of the risk factors of products and risk profiles of investors at the time of sale.
AT 25	Documentation	CRMPG III III-2a	The documentation of all high-risk complex financial instruments in cash or derivative form should include a term sheet: a concise summary highlighting deal terms and, where appropriate, collateral manager capabilities and portfolio and deal payment structure. The term sheets for all high-risk complex financial instruments, the full scope of which is outlined in Appendix A to CRMPG, must, among other factors, include the following: • a clear explanation of the economics of the instrument, including a discussion of the key assumptions that give rise to the expected returns; and • rigorous scenario analyses and stress tests that prominently illustrate how the instrument will perform in extreme scenarios, in addition to more probable scenarios.
		CRMPG III III-2b	The documentation associated with asset-backed high-risk complex financial instruments should include: • *A Preliminary and Final Offering Memorandum*: The offering memorandum should include prominently within its first several pages the nature of the economic interest of the underwriter or placement agent (and its affiliates) in the transaction, including a clear statement of the roles to be undertaken and services to be provided by the underwriter or placement agent (or its affiliates) to the transaction, as well as any interests in the transaction (if any) that the underwriter or placement agent (or its affiliates) are required or expected to retain. • *A Marketing Book*: The marketing book should include an in-depth description of the materials contained in the term sheet. It should especially focus on the collateral manager (in the case of a managed portfolio) and deal structure. • *Portfolio Stratifications*: This documentation should be in the form of spreadsheets containing bond level information (sector, rating, par balance, etc.), where known, and weighted-average loan level information (FICO, service, loan-to-value, percent fixed, occupancy, geographic distribution, second liens, etc.). • *Cash Flow/Stress Scenarios*: This documentation should be in the form of spreadsheets and cash flow model outputs. Standard runs should be provided for each tranche offered. The output will typically be in the form of tranche cash flows and default/loss percentages for the tranches and collateral.

Self-Assessment Template (*Continued*)

I. Management of Risk

H. Securitization and Complex Products (*Continued*)

AT 25	Documentation (*Continued*)	CRMPG III III-2c	In addition to the documentation standards above, the Policy Group recommends that term sheets and offering memoranda for all financial instruments having one or more of the key characteristics associated with high-risk complex financial instruments, as discussed on pages 54-56 of CRMPG, *must have* a "financial health" warning prominently displayed in bold print indicating that the presence of these characteristics gives rise to the *potential* for significant loss over the life of the instrument. The "health warning" should also refer to all risk factors in the offering documents. The Policy Group recommends that complex bilateral transactions that are privately negotiated between sophisticated market participants need not comply with Recommendations IV-2b and 2c, but are subject to Recommendation IV-2a regarding terms sheets. In certain circumstances, however, and by mutual written consent, the term sheet requirement may be waived for bilateral transactions between highly sophisticated market participants or in the context of a repeated pattern of transactions of a particular type.
		CRMPG III III-3 a-c	The Policy Group recommends strengthening the relationship between intermediaries and counterparties in sales, marketing, and ongoing communications associated with high-risk complex financial instruments. While its first recommendation calls for establishment of a common standard of sophistication for all market participants in high-risk complex financial instruments, the Policy Group believes that large integrated financial intermediaries should provide clients with timely and relevant information about a transaction beyond the disclosures discussed in its Recommendation III-2 above. III-3a. The intermediary and counterparty should review with each other the material terms of a complex transaction prior to execution. III-3b. Both the intermediary and counterparty must make reasonable efforts to confirm the execution of a complex transaction in a timely manner. • The counterparty should be promptly notified of any expected delay in the creation of a confirmation. • The intermediary should disclose whether evidence of agreement, such as a signed term sheet, is binding as to transaction terms. Each party should review the terms and promptly notify the other of any error. III-3c. When a counterparty requests a valuation of a high-risk complex financial instrument, the intermediary should respond in a manner appropriate to the purpose of the valuation. The intermediary's sales and trading personnel may provide a counterparty with actionable quotes or indicative unwinding levels. Only groups independent of sales and trading should provide indicative valuations and only in writing. Where relevant, such indicative valuations should include information describing the basis upon which the valuation is being provided.
		CRMPG III III-3d	As a part of the relationship between intermediaries and their counterparties following trade execution, the intermediary should make reasonable efforts on a case-by-case basis to keep the counterparty informed of material developments regarding the performance of key positions.
		PWG III B 9	Consistent with their disclosures of on-balance-sheet risk, public companies that sponsor or provide credit or liquidity enhancements to asset-backed commercial paper programs should disclose the distribution of assets underlying the programs by type, industry, and credit risk to the extent material to the company.
AT 26	Risk Management	IIF III.8	Firms' systems of internal control should include all securitization processes, all formal commitments to off-balance-sheet vehicles, and all securitization transactions with which the firm is associated. All relevant transactions should be included in the analysis when the firm has formal ongoing obligations to vehicles or exposures as investor, or simply a role in the transaction that could, under perhaps unforeseen circumstances, result in actual exposure for reputational risk or other reasons.
		IIF III.9	For management oversight and risk management purposes and to ensure a global view of exposures, firms should have integrated approval procedures for securitization commitments and transactions. Fragmented approvals that are difficult to aggregate should be avoided as they may lead to difficulties of aggregation or failure to recognize concentrations.
		IIF III.10	A firm's risk management and governance procedures should review frequently, and no less than annually, all material potential exposures to securitization transactions and off-balance-sheet vehicles, broken down by product; underlying assets; the role played by the firm's transactions (for example, as originator, sponsor, distributor, trustee); and its positions, if any, as investor in such transactions. Care should, however, be taken to reflect accurately the nature of the firm's exposures in analysis and reporting in each instance.

Self-Assessment Template (*Continued*)

I. Management of Risk

H. Securitization and Complex Products (*Continued*)

AT 26	Risk Management (*Continued*)	IIF III.11	Firms should consider whether risk of reputation damage could lead a firm to opt to take exposures back onto its balance sheet, with liquidity and capital consequences, even in the absence of legal obligation. The board of directors should assure themselves that senior management is appropriately attentive to regulatory and accounting requirements on significant risk transfer and consolidation.
		IIF III.12	Firms should ensure that analysis of concentrations and counterparty risks include exposures to guarantors of transactions, such as monoline insurers. Such analysis also should include direct and indirect exposures arising from associated credit-derivative positions.
		IIF III.13	Firms' risk management analysis of securitization transactions should include analysis of the performance of underlying assets and any actual or potential resulting exposures.
		IIF III.14	Firms should ensure that warehousing and pipeline risks of assets held for future securitization tranches not yet sold are included in the global exposure analysis.
		IIF III.15	For own-asset securitizations or securitizations structured by the firm, there should be functional separation of groups structuring transactions from those investing or trading in them. To avoid potential structuring/trading conflicts between the origination team and the trading desk that purchases any retained positions or distorting incentives regarding investment strategy, both groups should provide independent advice to a senior credit decision-making body in the firm with authority to make balanced decisions.
		IIF III.16	Senior management should carefully assess the risks of vehicles associated with the firm, including assessment of the size and stability of the vehicles relative to their own financial, liquidity, and regulatory capital positions. Analysis should include structural, solvency, liquidity, and other risk issues, including the effects of covenants and triggers, and include such issues in their liquidity stress testing. Senior management should take care that the board of directors is apprised of the risks of vehicles and cognizant of their implications for the firm's overall risk appetite.
		IIF III.17	Firms should have a periodic look-through analysis to provide senior management with a comprehensive overview of securitized assets and securitized asset classes. Both the relevant business units and the risk management function should have the duty to collect and transmit within the firm early-warning signals as to deterioration of underlying assets or other emerging risks that affect its securitization transactions. The firm's structure should ensure prompt risk management attention to such warnings. IT investment should be adequate to support this function.
		IIF III.18	Firm should be able to include all associated securitization vehicles and their underlying assets in their assessments of group-wide risk concentrations, consistently with recommendation I.41. Such concentrations should be included in regular reporting to the relevant oversight committees, such as the asset and liability committee or credit committees.
		IIF I.36	Regardless of whether the business focuses on any specific portion of a securitization or other product chain, risk management should assess risks on an integrated basis, recognizing interdependencies along the product chain, including those aspects in which the firm is not directly involved (for example, the firm may not be involved in the organization of debt underlying the products it handles).
		IIF I.37	Firms should pay particular attention to risk-integration issues, especially in dealing with structured products and other product chains. The adequate measurement of correlations and interdependencies is key to appropriately managing risk in these types of products.
		IIF I.38	Firms should continue developing risk models that specifically address the risks emanating from securitization and other forms of contingent risk. In particular, models should be able to "look through" the direct risk and capture the market sensitivities of the exposures. In this regard, it is fundamental that securitization models specifically address the risk arising from multi-name products.
		IIF I.39	Both the risk management and finance functions should clearly understand the sources and risk/reward implications of profit-and-loss effects.
		IIF I.40	Risk assessment for new products should consider performance under stress, including both firm-specific and market stress, and new product approvals should include the conditions under which authorization is granted. Examples of conditions include limits, performance requirements, and assumptions that must remain valid. Consideration of reputational risk is also a fundamental component of risk assessment of new products.

Self-Assessment Template (*Continued*)

I. Management of Risk

I. Stress Testing

AT 27	Scope of Scenarios	CRMPG III IV-8a	The Policy Group recommends that firms think creatively about how stress tests can be conducted to maximize their value to the firm, including the idea of a reverse stress test where the emphasis is on the contagion that could cause a significant stress event to the firm.
		CRMPG III IV-8b	The Policy Group recommends that firms incorporate the expanded suite of stress tests into a formalized production schedule, against which trends and developments in key risk factors and exposure amounts can be tracked.
		CRMPG III IV-13a	The Policy Group recommends that all large integrated financial intermediaries should, on a regular basis, conduct liquidity stress tests to measure their maximum liquidity outflow (MLO). Stress tests should be based on scenarios that consider how normal sources of liquidity, both secured and unsecured, could be disrupted for the firm, the markets, or both. The stress-test scenarios should focus on potential liquidity outflows, taking into account a firm's particular vulnerabilities.
		CRMPG III IV-13b	The Policy Group recommends that, in addition, at a minimum, firms should monitor their MLO within the first thirty days and for additional intervals within this timeframe (for example, overnight, one week, two weeks). The MLO is defined as the net loss of liquidity under the firm's most severe scenario from the time of the calculation for the tenors prescribed.
		CRMPG III IV-13c	The Policy Group recommends that stress scenarios, both for purposes of stress testing and calculation of MLO, should: • include both firm-specific and systemic events and their overlapping nature; • consider extreme shocks as well as progressive events; • take into account implicit as well as explicit risks and potential damage of a firm's actions to its franchise; • review the potential for loss of key sources of secured and unsecured funding, including deposits; commercial paper, and other short- and long-term debt. Firms should also consider the impact of funding illiquidity on asset-backed commercial paper conduits and on the ability to securitize pools of assets; • analyze the potential outflows related to customer activity, including prime brokerage; • examine the impact of on- and off-balance-sheet exposures, including the potential outflows related to derivative transactions, liquidity commitments, and special purpose vehicles; • consider the impact of intraday liquidity exposures, including the heightened interest of counterparties to accelerate trades and settlements in times of stress and other time-related mismatches in the flow of funds; • consider other large cash payments including salaries, taxes, and lease payments; • as with all liquidity practices, evaluate the impact on both individual legal entities, as well as on the consolidated firm; and • consider the availability of central bank facilities. Generally speaking, extraordinary central bank facilities, such as the Federal Reserve System's Primary Dealer Credit Facility, should not be considered an element of an effective liquidity plan. These stress tests, and their results, would be internally classified, confidential documents that would be shared with senior management, boards of directors, and primary supervisors on a periodic basis. The information provided by the stress tests should be used to identify funding gaps and assess where gaps are incompatible with the firm's risk appetite. Since the stress-test information provided to supervisors would be confidential supervisory information, it would and should be protected from public disclosure. (Comparable to IIF I.56.)
		IIF I.45	Firms should develop internal management procedures that make stress testing part of the management culture, so that its results have a meaningful impact on management decisions. Such procedures should discourage mechanistic approaches and promote a dialogue among the business, senior management, and risk function as to the types of stress tests to be performed, the scenarios most relevant, and the impact assessment of such tests (including the consideration of stress-testing results at the moment of determining the risk appetite of the firm).
		IIF I.47	Stress-testing methodologies should be used actively to complement and explicitly address the limitations of other risk management tools, including VaR. In particular, given the dependence of VaR on historical data, stress testing should be used to test the risk implications of scenarios on which limited historical data are available.
		IIF I.48	Stress testing should include challenging scenarios. Scenarios should be defined and developed as conditions evolve. Participation of senior management as well as business line staff is fundamental for the adequate definition of such scenarios. Methodologies should balance historical and forward-looking scenarios and avoid static scenarios or ones that no longer reflect market developments.

Self-Assessment Template (*Continued*)

I. Management of Risk

I. Stress Testing (*Continued*)

AT 27	Scope of Scenarios (*Continued*)	IIF I.49	Stress-testing policies should be designed so that the likelihood of severe events is not consistently underestimated and the firm's ability to manage crises in an effective and timely manner is not overestimated.
		IIF I.51	Stress-testing methodologies should be designed to deal adequately with risk concentrations. For this purpose, methodologies should be firm-wide and comprehensive, covering on-balance-sheet and off-balance-sheet assets, contingent and noncontingent risks, and all risks independent of their contractual nature.
		IIF I.52	Stress testing and related analysis should take into account the risk of model error and in general, the uncertainties associated with models, valuations, and concentration risks that may arise through the cycle. Stress testing should be used to explore the assumptions and identify the limitations of models used for pricing and risk modeling.
		IIF I.53	Firms should establish adequate procedures so that stress testing captures risk originating from securitization exposures. In particular, firms should ensure that, when dealing with securitized products, a full set of data related to the underlying assets is obtained so that such data can be incorporated in stress-testing models.
		IIF I.54	Stress testing should include pipeline and warehousing risks (for example, with respect to securitizations and leveraged loans) to which the firm accumulates positions for subsequent distribution, and should include events that might delay, change the terms of, or prevent such distribution.
		IIF I.55	Firms should continue refining stress-testing techniques that take into account the effect of stresses on exposures to leveraged counterparties, including hedge funds, financial guarantors, and derivatives counterparties (whether or not they provide hedges), including potential cross-correlation of the creditworthiness of such counterparties with the risks of assets being hedged.
		IIF III.6	Firms should examine through stress testing and analysis the conditions under which the size of their balance sheets might expand during times of stress, and consider appropriate and proportionate contingency plans for such eventualities.
		IIF III.7	Firms' stress-testing analyses should include "tied-position" situations in instruments that are material for them.
AT 28	Governance	IIF I.46	Firms should ensure that their stress-testing methodologies are consistently and comprehensively applied throughout the organization, evaluating multiple risk factors as well as multiple business lines and taking group-wide views as well as business- and entity-specific views. Stress-testing methodologies should be integrated with other risk management tools as well as with other internal processes. Equally importantly, methodologies should take into account proprietary models used by different front-office units.
		IIF I.50	Stress testing should play an integral role in assessing the firm's risk profile in relation to its risk appetite and be conducted across all business activities, risk types, and exposures.
		IIF I.57	Firms should reinforce procedures promoting active discussion between senior management and risk management as to the tests being performed, the scenarios to be tested, and their implications for the firm. Strong feedback loops are essential in any robust stress-testing methodology. Equally important, methodologies should take into account the relationships between stresses and valuations effects.

II. Disclosure and Transparency*

AT 29	Prospectus Disclosure	FSF III.10	Originators, arrangers, distributors, managers, and credit rating agencies should strengthen transparency at each stage of the securitization chain, including by enhancing and standardizing information on an initial and ongoing basis about the pools of assets underlying structured credit products.
AT 30	Standardization and Increased Transparency	IIF VI.2	Firms should endeavor to standardize market definitions and structures and to clarify and standardize the roles of agents at a global level.
		CRMPG III II-6	The Policy Group recommends that firms provide tabular disclosures about the effects of restrictions on the use of consolidated assets, nonrecourse liabilities, and minority interests.

* Firms are encouraged to refer to *Leading-Practice Disclosures for Selected Exposures*, Senior Supervisors Group, April 11, 2008.

Self-Assessment Template (*Continued*)

II. Disclosure and Transparency*

AT 30	Standardization and Increased Transparency (*Continued*)	PWG III B 4	To enable investors to improve their due diligence for structured finance products, underwriters and sponsors should provide improved disclosures for real estate mortgage-backed securities, asset-backed securities, collateralized debt obligations, and other structured products. Asset managers and financial institutions, including those running conduits, should provide improved disclosures.
		IIF VI-3	The industry should develop harmonized guidelines for transparency and disclosure for structured products across major markets.
		IIF VI-4	The industry should consider adopting common platforms and technology to improve access to information and widen the dissemination and distribution of information and documents among market participants.
AT 31	Risk Disclosure and Transparency	IIF VI.5	Firms should ensure that their disclosure provides a sufficient overview of their current risk profiles and risk management processes and highlights key changes (from previous periods) to their current risk profile, including their securitization activities. This overview should have an appropriate balance between qualitative and quantitative information, with a view to providing both a snapshot of the risk position and a perspective on the risk strategy of the firm, including its approach to liquidity risk management.
		FSF III.1	The Financial Stability Forum strongly encourages financial institutions to make robust risk disclosures using the leading disclosure practices summarized in the report.
		IIF VI.10	Firms should provide meaningful disclosures for material actual or contingent funding requirements for off-balance-sheet vehicles, including contractual obligations and funding requirements that may reasonably be expected to arise for reputational or other reasons.
AT 32	Valuations Disclosure and Transparency	IIF VI.6	Firms should put in place substantively useful disclosure of valuation processes and methodologies and of the limitations of models, including adjustments and risk sensitivities. (Comparable to FSF III.7.)
		IIF VI.7	Firms should include clear and useful disclosures of valuations based on limited market inputs or based on mark-to-model procedures and about material changes in the bases of valuations if, for example, certain assets become less liquid and can no longer be valued from market inputs.
		IIF VI.8	Firms should disclose the inherent uncertainties associated with material valuations; the limitations of models; and the sensitivities of assumptions and inputs into the models, model adjustments, and reserves, for all positions deemed material, to enhance the understanding of market participants.
		IIF VI.9	Firms should disclose the limitations of indices used in valuations.

* Firms are encouraged to refer to *Leading-Practice Disclosures for Selected Exposures*, Senior Supervisors Group, April 11, 2008.