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July 11, 2011

Mr. David A. Stawick
Secretary of the Commission
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, DC 20581

Re: RIN 3038-AC97 - MARGIN REQUIREMENTS FOR UNCLEARED SWAPS FOR SWAP DEALERS AND MAJOR SWAP PARTICIPANTS

Dear Mr. Stawick,

The International Swaps and Derivatives Association[1] ("ISDA") and the Securities Industry and Financial Markets Association[2] ("SIFMA") (hereinafter referred to as the "Associations") appreciate this opportunity to provide comments to the Commodity Futures Trading Commission (the "Commission") regarding the recently released notice of proposed rulemaking and request for comments ("NPR") concerning margin requirements for non-cleared swaps and non-cleared security-based swaps and the implementation of the related statutory provisions enacted by Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act").

For purposes of this discussion, swap dealers and major swap participants are "Swap Entities" and a Swap Entity that is subject to regulation by the Commission is a "Covered Swap Entity" or "CSE".

[1] Since 1985, ISDA has worked to make the global over-the-counter (OTC) derivatives markets safer and more efficient. Today, ISDA is one of the world's largest global financial trade associations, with over 800 member institutions from 56 countries on six continents. These members include a broad range of OTC derivatives market participants: global, international and regional banks, asset managers, energy and commodities firms, government and supranational entities, insurers and diversified financial institutions, corporations, law firms, exchanges, clearinghouses and other service providers. Information about ISDA and its activities is available on the Association's web site: www.isda.org.

[2] SIFMA brings together the shared interests of hundreds of securities firms, banks, and asset managers. SIFMA's mission is to support a strong financial industry, investor opportunity, capital formation, job creation and economic growth, while building trust and confidence in the financial markets. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association. For more information, please visit: www.sifma.org.

Executive Summary

I. Macro-economic Impact.

We estimate that the additional margin required by the proposal could be as high as $1.0 trillion and hundreds of billions of additional liquidity would need to be secured for financial entities and dealers. This estimate does not include initial margin for any derivatives other than interest rate products but does include variation margin for all products. We note that the OCC estimated the total impact would be $2.05 trillion in additional initial margin.[3] Of this, approximately $1.1 trillion is attributed to interest rate products alone over a one year period.[4]

II. Extraterritoriality.

The rule should provide that the margin requirements do not apply to swaps between a non-U.S. Swap Entity and a non-U.S. entity, regardless of whether the non-U.S. entities are subsidiaries, offices, branches or other affiliates of U.S. entities or guaranteed by U.S. entities.

III. Requirements for Entity Types.

Nonfinancial Entities ("NFEs"): Credit support agreements should not be required for NFEs.

Financial Entities ("FEs"): The test for determining whether a threshold is applicable should depend solely on determinations of significant swaps exposure or the internal ratings of the CSE. Sovereigns, end-users, special purpose vehicles used in structured finance and state and municipal entities should not be subject to the margin rules and should not be financial entities.

Swap Entities: Swap Entities should not have to post initial margin to CSEs on inter-Swap Entity swaps.

IV. Margin Requirements.

Proprietary Models: A CSE should be able, if it chooses, to use its own proprietary initial margin model, subject to Commission review. A CSE should not be required to use a model from a vendor or clearing organization or a model that has been approved by the Prudential Regulators [5] ("PRs"). Models approved by foreign regulators, the Prudential Regulators or the Securities and Exchange Commission ("SEC") should be acceptable to the Commission without any additional Commission approval.

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[3] See OCC study, "Unfunded Mandates Reform Act, Impact Analysis for Swaps Margin and Capital Rule", dated April 15, 2011 ("OCC Study"). Available at: http://www.regulations.gov/#!documentDetail;D=OCC-2011-0008-0002, pp. 5 - 6.

[4] OCC Study, p. 6

[5] The Prudential Regulators are: the Treasury Department (Office of the Comptroller of the Currency) ("OCC"); Board of Governors of the Federal Reserve System ("Federal Reserve"); Federal Deposit Insurance Corporation ("FDIC") ; Farm Credit Administration ("FCA"); and the Federal Housing Finance Agency ("FHFA").

Margin Methodology: Methodologies other than Value-at-Risk ("VaR") should be permitted. If VaR is used, a CSE should determine the relevant liquidation time horizon, subject to regulatory review.

Netting: For initial and variation margin, the CSE should be able to net all swaps against other swaps and against other obligations if such netting is legally enforceable.

Portfolio-based Margining: Margin models that provide for portfolio-based margining across cleared and uncleared swaps and other products and across legal entities should be permitted.

Thresholds: CSEs should determine the relevant thresholds for all counterparties, subject to regulatory review.

Segregation and Custody: If initial margin is required for inter-Swap Entity swaps, segregation should not be required. If such segregation is required, the collateral should not be required to be held at an independent custodian that is in the same insolvency jurisdiction as the CSE.

V. Eligible Collateral.

CSEs should be able to determine eligible collateral and relevant haircuts for such collateral, subject to regulatory review.

VI. Delivery Timing.

Initial margin should not have to be posted on the date of execution.

VII. Inter-Affiliate Swaps.

Inter-affiliate swaps should not be subject to margin requirements.

VIII. Implementation.

The requirements should become effective on a phased-in basis that parallels the adoption of requirements to clear swaps in different asset classes. We request that the Commission undertake a study of how much time will be needed to negotiate and revise documentation to implement the requirements. Based on discussions with our members, our preliminary estimate of the time and cost required to establish the requisite collateral arrangements per CSE is 1 year, 11 months and $142 million, respectively.

Our comments below are organized as follows:

IV. Margin Requirements – discussion of initial and variation margin requirements, and rules regarding the posting of collateral (page 13);

V. Eligible Collateral – discussion of assets that may be posted for margin and haircuts (page 25);

VI. Delivery Timing – discussion of posting timeframes (page 27);

VII. Inter-affiliate – discussion of inter-affiliate swaps (page 28);

VIII. Implementation – discussion of rules related to effective date and implementation (page 29); and

IX. Documentation – discussion of required documentation (page 31).

Annex I provides additional detail about the macro-economic impact of the proposed rules and Annex II provides a discussion of the models used to determine margin.

A major proposal such as this raises many issues and concerns. We respectfully recommend that after reviewing the collection of comments submitted on these proposed rules, the Commission engage in an on-going assessment and dialogue with market participants and fellow domestic and global regulators. We welcome the opportunity to participate and provide the benefit of the experience and market expertise of our members. We request that the Commission consider further comments made after the SEC issues its proposed rules on margin requirements.

I. Macro-Economic Impact

ISDA estimates that collateral requirements created by the proposed margin rules for uncleared swaps by the Commission and Prudential Regulators may total as much as $1.0 trillion in the next several years if the rules are applied globally. This estimate does not include initial margin for any derivatives other than interest rate products but does include variation margin for all products. In a separate study, the OCC has estimated that the proposed rules would result in a collateral requirement of approximately $2 trillion over a one year period.[6] Their estimate is for initial margin only, but for all types of swaps.[7] For interest rate swaps alone, the OCC's estimate of additional initial margin is $1.1 trillion.[8] In addition, there may be a need for perhaps $250 billion of extra liquidity required for future variation margin calls. This increased collateral demand would arise as soon as new derivative contracts are executed unless new master agreements are executed to accommodate the proposed limitations on netting. In fact, hundreds of thousands of new master agreements would have to be executed just to prevent the immediate collateral consequences from occurring. We believe the amount of additional collateral requirements and liquidity drain would have an impact on financial markets and economies generally. Collateral and liquidity requirements, may force investors to sell assets, reduce the amount of derivative activity generally, and, thereby, reduce liquidity. It should be noted that the increase in collateral and the accompanying impact on liquidity cannot be analyzed in isolation and must be assessed in the context of increased capital charges and, potentially, increased liquidity requirements for banks, both of which will increase the cost of borrowing.

[6] OCC Study, pp. 5-6.
[7] OCC Study, p. 6.
[8] OCC Study, p. 6.

Counterparties may choose to execute duplicate master agreements for these new transactions. ISDA has not estimated what the extra credit costs will be from sub-optimal netting. However, ISDA estimates that the collateral requirements mentioned above ($1.0 trillion) would take effect over four or five years. The requirements would not grow linearly but may still amount to more than a hundred billion dollars in the first full year. Additional credit facilities or cash reserves would also need to be available for future margin calls. Estimating the effects of these amounts on the global economy in the first years of the rules is difficult to assess. It is self-evident they would impact economic growth. One simple measure of cost might be 1% on the extra collateral and half of that or 50 basis points on the additional liquidity required. This would amount to $11 billion per year once the rules are fully in effect. See Annex I for further discussion of ISDA's analysis.

II. Extraterritoriality – Exclusions from Margin Requirements

1. The Commission's rules should address extraterritoriality issues. Swaps between non-U.S. CSEs and non-U.S. counterparties should not be subject to the margin rules. The rules should provide that non-U.S. CSEs include non-U.S. branches, offices, subsidiaries and other non-U.S. affiliates of U.S. entities and non-U.S. counterparties include non-U.S. funds or other entities with a U.S. advisor and non-U.S. entities guaranteed by a U.S. entity.

Scope of the Dodd-Frank Act - Sections 722 and 772 of the Dodd-Frank Act address the Act's jurisdictional scope.[9] As discussed in ISDA's and SIFMA's earlier letters in response to the proposed rules on registration, given the Supreme Court decision in *Morrison v. National Australia Bank Ltd.* (2010),[10] we believe that the scope of these sections should be read narrowly.[11] Thus, as applied to the rules on margin, the better interpretation of this jurisdictional scope is that the margin requirements should not apply to swaps between a foreign swap dealer or major swap participant and another foreign entity, regardless of such entities' affiliation with U.S. companies.

International harmonization - The Dodd-Frank Act espouses the principle of consistency of international regulation in Section 752 (International Harmonization). The Act directs the U.S. regulatory bodies to coordinate with foreign regulators "[i]n order to promote effective and

[9] Section 722 provides that the Act's provisions "shall not apply to activities outside the United States unless those activities – (1) have a direct and significant connection with activities in, or effect on, commerce of the United States; or (2) contravene such rules or regulations as the Commission may prescribe or promulgate as are necessary or appropriate to prevent the evasion of any provision of this Act…". Section 772 provides that "[n]o provision of this title …shall apply to any person insofar as such person transacts a business in security-based swaps without the jurisdiction of the United States, unless such person transacts such business in contravention of such rules and regulations as the Commission may prescribe as necessary or appropriate to prevent the evasion of any provision of this title…".

[10] 561 U.S. ___, slip op. No. 08-1191 (June 24, 2010).

[11] See ISDA comment letter re: Proposed rules: Registration of Swap Dealers and Major Swap Participants (RIN 3038-AC95), dated January 24, 2011, p. 4. Also SIFMA's comment letter re: Proposed rules: Registration of Swap Dealers and Major Swap Participants (RIN 3038-AC95) and Further Definition of "Swap Dealer," "Security-Based Swap Dealer," "Major Swap Participant" and "Eligible Contract Participant," (RIN 3235-AK65), dated February 3, 2011, pp. 4-6.

consistent global regulation of swaps and security-based swaps".[12] Any imposition of U.S. margin requirements on swaps between two foreign entities will conflict with this principle. Even if one party is a branch, office or subsidiary of a U.S. entity, other nations will regulate such branch, office or subsidiary and it will be subject to the margin regulations applicable in that nation. Hence, the further imposition of U.S. margin requirements will interfere with the oversight of the other regulators and directly contradict the mandate of coordination and harmonization under Section 752.

Other regulations - The margin requirements are transaction-based rules rather than entity-based requirements such as capital. Existing transaction-based regulations do not generally impose requirements on transactions between non-U.S. parties and branches, subsidiaries and other foreign affiliates of U.S. entities. For example, under Regulation S under the Securities Act of 1933, the definition of U.S. person expressly excludes foreign branches and generally excludes foreign subsidiaries. As a result, a sale of securities to such a branch or foreign affiliate will qualify as a sale to a non-U.S. person under the Securities Act. We suggest using a definition of U.S. person similar to that employed in Regulation S.

Practical issues - The imposition of Dodd-Frank Act requirements on foreign branches, offices, subsidiaries or other foreign affiliates of U.S. entities that are registered as swap dealers or major swap participants also raises a number of practical issues. These requirements would place such branches, offices, subsidiaries or other foreign affiliates on an unequal footing with their local competitors. As noted by the New York Congressional Delegation, a bipartisan group of seventeen New York lawmakers, in their letter to the regulatory agencies, "disparate treatment of U.S. firms will only encourage participants in the derivatives markets to do business with non-U.S. firms."[13] Also, despite attempts at harmonization, there may be conflicts between U.S. and applicable foreign regulation that will make it impossible for a foreign branch, office, subsidiary or other foreign affiliate of a U.S. entity to engage in swaps with a non-U.S. entity. This would occur if, for example, the types of eligible collateral required by the U.S. and foreign jurisdictions are mutually exclusive, or if segregation requirements are incompatible or regulations require clearing through different CCPs.[14] Imposition of the margin rules on parties guaranteed by U.S. entities would have the undesirable outcome of discouraging the use of a valuable risk mitigating tool and create inconsistent international regulations.

2. For swaps between a U.S. entity and a foreign entity, regulators should harmonize regulations with foreign regulators.

As discussed above, the Dodd-Frank Act calls for regulators to conform to the principle of international consistency in Section 752 (International Harmonization). Cross-border swaps will not be possible unless the U.S. recognizes some aspects of foreign regulation; otherwise the regulations may be overtly inconsistent (for example, if different types of eligible margin are

[12] Section 752 of the Dodd-Frank Act .

[13] Letter addressed to the Chairmen of the Federal Reserve, Commission and FDIC and the Acting Comptroller of the OCC, dated May 17, 2011. Copy available at: http://gillibrand.senate.gov/newsroom/press/release/?id=d761e70f-bb1a-444b-bea1-c6c13a6460c0

[14] See ISDA comment letter re: Joint Proposed Rule: Further Definition of "Swap Dealer," "Security-Based Swap Dealer," "Major Swap Participant," "Major Security-Based Swap Participant" and "Eligible Contract Participant" (CFTC RIN 3038-AD06; SEC RIN 3235-AK65; SEC File No. S7-39-10), dated February 22, 2011, p. 2.

required) or excessively burdensome. The rules should recognize the sufficiency of host country regulation and should recognize underlying policy goals without requiring that such goals are always achieved in the same manner. The goal of regulatory reform is to ensure that market risks are identified and mitigated, while minimizing any negative impact on the continued and efficient operation of the financial markets. Conflicting and duplicative margin requirements would have a significant chilling effect on a major segment of the derivatives market.

The necessity of harmonization with regulations of other nations is increased by important differences in timing that could significantly impact U.S. financial markets. The fact that firms based or doing business in U.S. markets will be subject to a new regulatory framework well before a complementary framework is established in other key jurisdictions is itself cause for concern. The potential for the U.S. framework to inadvertently create an uneven playing field for the U.S. markets adds to those concerns. So too does the prospect that some firms active in the U.S. markets may have to comply with two sets of regulatory regimes. Ultimately this could lead to increased costs, decreased liquidity and a reduction in the overall availability of capital in the U.S. markets.

Given the complexity and global nature of the industry, it is essential these rules are well coordinated across jurisdictions globally so as to minimize regulatory arbitrage and so that banks are able to continue operations and comply with their respective laws and regulations. We request a thorough and proper review of these rules in the context of all the impacted regions, and ask that special attention be paid to synchronization of rule implementation internationally, to avoid regulatory arbitrage opportunities that may be transient but even in a short time period could do lasting damage to the competitiveness of certain markets.

III. Requirements for Entity Types

1. If a CSE's counterparty is an end-user, credit support agreements ("CSAs") should not be required by regulation.

Congressional intent - The Commission's proposal ("CFTC Proposal") requires CSEs to enter into a CSA with all counterparties.[15] However, Congress did not intend that the Dodd-Frank Act impose margin requirements on non-financial end-users. Senators Lincoln and Dodd specifically addressed Congressional intent regarding the treatment of end-users in a colloquy. They stated that "[t]he legislation does not authorize the regulators to impose margin on end-users….it is imperative that the regulators do not unnecessarily divert working capital from our economy into margin accounts….Congress clearly stated in this bill that the margin and capital requirements are not to be imposed on end-users."[16] Chairman Frank concurred and stated that "[w]e do differentiate between end-users and others. The marginal requirements are not on end-users."[17]

[15] CFTC Proposal §§23.151 and 23.504(b).

[16] Letter from Senators Lincoln and Dodd, addressed to Chairmen Frank and Dodd, dated June 30, 2010. Also presented in their Congressional colloquy, Congressional Record – Senate, S6192, dated July 22, 2010.

[17] Colloquy of Rep. Frank, Congressional Record – House, H5248, dated June 30, 2010.

Dealer practices - Current practices employed by dealers obviate the need for CSAs with NFEs.[18] Dealers collect collateral from NFEs when needed and have extensive risk management systems in place to determine whether and how much collateral is needed. These risk management arrangements will be subject to regulatory oversight when dealers are registered. Many dealers collateralize exposure to corporate end-users through collateral arrangements other than those in the swap agreements. In many cases, particularly for swaps involving foreign exchange and rates, dealers' positions are secured through the secured lending arrangement that the customer enters into with the dealer pursuant to which the customer provides security in real estate, physical plant and other assets. For example, a dealer may enter into a secured loan with a counterparty who then may wish to hedge its rate exposure to that loan by entering into an interest rate swap with the dealer. Rather than collateralizing the swap with a CSA, the dealer and counterparty would collateralize the swap exposure with a portion of the collateral securing the loan. As a result, specific requirements as to CSAs with NFEs are not necessary.

Operational cost - A requirement to have CSAs for all NFE counterparties would impose significant operational burdens and costs on end-users and CSEs. CSEs would have to negotiate, establish and maintain documentation for all counterparty relationships, even if thresholds were so high that it would be it unlikely that margin would ever be collected. This is contrary to Congressional intent that the regulators "establish margin requirements for such swaps or security-based swaps in a manner … to protect end-users from burdensome costs."[19] In addition, such a requirement would precipitate a flood of documentation, some of it unnecessary, in the effort to ensure compliance by the effective date and will likely result in documentation bottlenecks. Another important issue for end users is that many of them have negative pledges in their existing credit facilities or bonds that make pledging collateral difficult or impossible.

2. Whether a threshold is applicable to margin posted by an FE should depend only on the FE's significant swap exposure or the CSE's internal ratings.

Criteria - The universe of FEs presents a broader spectrum of risk than that of NFEs, so some distinction between riskier and less risky entities is appropriate. However, the test for "threshold-eligible" FEs (i.e., FEs that do not have to post collateral below a certain threshold) should not include requirements that (i) the FE is subject to insurance or bank capital requirements or (ii) the FE is hedging the risks of its business activities. Such criteria are too restrictive and exclude entities that would generally be considered less risky and should be treated as such. For example, pension funds do not qualify as "threshold-eligible" under the CFTC Proposal because they are not subject to capital requirements established by a prudential regulator or state insurance regulator. However pension funds are subject to extensive requirements under ERISA (which is enforced by the Department of Labor, Department of the Treasury and the Pension Benefit Guaranty Corporation) and pose little risk of default to their counterparties. They should therefore qualify as "threshold-eligible". Similarly, entities subject to non-U.S. regulatory capital requirements should also qualify as “threshold-eligible”.

[18] Since the events of 2008, dealers have rethought many of their practices and have worked with regulators to learn from such events. The re-examination has resulted in an enhancement of certain practices and an affirmation of the soundness of other practices that were in effect at such time. References to dealer practices in this letter refer to these enhanced and improved practices.

[19] Letter from Senators Lincoln and Dodd, addressed to Chairmen Frank and Dodd, dated June 30, 2010. Also presented in their Congressional colloquy, Congressional Record – Senate, S6192, dated July 22, 2010.

The critical issue in distinguishing between "no-threshold" (i.e., FEs that must post collateral without regard to thresholds) and "threshold-eligible" counterparties should be the risk that the FE poses to the CSE and to the financial system as a whole. In assessing this risk, appropriate tests may be either a numerical test, comparable to the "significant swaps exposure" test that is currently proposed, in order to assess the size of the FE's swap positions and the potential impact of the FE counterparty's risk exposure on the CSE, or a ratings test used by the CSE to assess the credit quality of the FE counterparty. Such ratings test could use the same rating scales that are used for capital calculations, such as the internal risk ratings used under the Basel II Advanced Approaches. Under the Basel II Advanced Approaches, banks must assign each wholesale obligor a ratings grade and associate a one-year probability of default with each grade that reflects a reasonable estimate of the average one-year default rate over the economic cycle for the ratings grade.

Significant swaps exposure - The requirements for treatment as a "threshold-eligible" FE counterparty specify that the counterparty not have a "significant uncleared swaps exposure"[20]. However, the CFTC Proposal does not define "significant uncleared swaps exposure", but instead defines "significant swaps exposure." The Commission should clarify that "significant swaps exposure" is based only on uncleared swaps.[21] Cleared exposures are subject to a separate risk regime and their exposures are effectively mitigated by the nature of being cleared through a central counterparty clearing house. "Significant swaps exposure" is defined in terms of quantity[22] and uses defined terms that measure risk exposure that are taken from the proposed definition of "major swap participant". ISDA has recommended alternative measures of risk exposure in a prior comment letter with regard to the tests for a major swap participant.[23] An alternative to the "significant swaps exposure" test would be to allow use of CSE internal rating systems, which are reviewed by regulators and validated by benchmarking to historical data.

Look-back - Certain entities may fluctuate between being "high-risk" and "low–risk" and the test should address the issue of possible instability. We suggest, as was also suggested in a prior comment letter from ISDA on major swap participants, that there be a look-back period for the exposure threshold and that it be set at a full year of meeting the relevant test in consecutive immediately preceding quarters.[24] This would reduce the incidence of unintentional shifting between classifications with the attendant unpredictability.

Type determination – The rules should provide that the CSE responsible for determining the counterparty type may rely on representations given by the counterparty and may also rely on the

[20] CFTC Proposal §23.153(c)(1)(ii), 76 Fed. Reg. 82 at 23745.

[21] The CFTC Proposal §23.153 (c)(1)(ii) refers to "significant *uncleared* swaps exposure" (emphasis added); 76 Fed. Reg. 82 at 23745.

[22] The proposed definition in the CFTC Proposal is: Swap positions greater than or equal to either: (1) $2.5 billion in daily average aggregate uncollateralized outward exposure; or (2) $4 billion in daily average aggregate uncollateralized outward exposure plus daily average aggregate potential outward exposure, with additional thresholds for security-based swaps. 76 Fed. Reg. 82 at 23744.

[23] See ISDA comment letter re: Joint Proposed Rule: Further Definition of "Swap Dealer," "Security-Based Swap Dealer," "Major Swap Participant," "Major Security-Based Swap Participant" and "Eligible Contract Participant" (CFTC RIN 3038-AD06; SEC RIN 3235-AK65; SEC File No. S7-39-10), dated February 22, 2011, p. 13.

[24] ISDA comment letter re: Joint Proposed Rule: Further Definition of "Swap Dealer," "Security-Based Swap Dealer," "Major Swap Participant," "Major Security-Based Swap Participant" and "Eligible Contract Participant" (CFTC RIN 3038-AD06; SEC RIN 3235-AK65; SEC File No. S7-39-10), dated February 22, 2011, p. 14.

counterparty to provide information on any subsequent changes to the counterparty's status. Whether a counterparty is a "threshold-eligible" or "no-threshold" FE may depend on the total swaps exposure of the counterparty. CSEs will have no means to determine total swaps exposures of their counterparties, so allowing reliance on representations is the only practical way for CSEs to establish the correct classification of their counterparty. The rules should provide similar allowance for CSEs to rely on counterparty representations in the determination of whether the counterparty is a Swap Entity or NFE.

Internal Determination – Instead of mandating a static definition for "no-threshold" and "threshold-eligible" financial end-users, the Commission should consider providing CSEs the ability to differentiate between "no-threshold" and "threshold-eligible" financial end-users based on internal models. Such models would be subject to review and approval by the Commission, thereby ensuring that the models used by the institution to differentiate between financial institutions are based on robust and justifiable factors. This approach would have the further advantage of addressing several of the issues noted above, such as allowing a more dynamic and sensible method of determining when a financial entity has changed status from a "no-threshold" to a "threshold-eligible" financial entity (and vice-versa). Given that the Commission will already be reviewing internal margin models for CSEs that choose the internal margin model approach, the Commission could make review and approval of such CSEs' methodology part of this review process.

3. Certain specific entities should be excluded from margin requirements and from the FE definition. These entities are: end-users under the Dodd-Frank Act, sovereigns, special purpose vehicles ("SPVs") and state and municipal governmental entities. Also, FEs should not include foreign FEs, foreign governmental entities and any other person that the Commission may designate.

End-users – Financial entities that would be treated as end-users under the Dodd-Frank Act and thereby qualify for exemptions from clearing under the Dodd-Frank Act should be exempt from margin requirements. As discussed above, all end-users should be exempt from the margin requirements. This exemption should include those end-users engaged in financial activities that are specifically excluded from the definition of FE under the Dodd-Frank Act, including an entity whose primary business is providing financing, that uses derivatives for the purpose of hedging underlying commercial risks related to interest rate and foreign currency exposures, 90% or more of which arise from financing that facilitates the purchase or lease of products, 90% or more of which are manufactured by the parent company or another subsidiary of the parent company, and certain affiliates.[25] Also, FEs should not include entities that are not "financial entities" for purposes of the Dodd-Frank Act, which would exclude foreign FEs, foreign governmental entities and any other person that the Commission may designate.

Sovereigns – Foreign sovereigns should not be subject to the margin requirements and should not be FEs. First, the Dodd-Frank Act itself does not include foreign governments in the definition of FE. Second, as discussed in more depth in the section on extraterritoriality, the

[25] Dodd-Frank Act – Section 723(a)(2) – Clearing, which amends the Commodity Exchange Act ("CEA") Section (2) and inserts Section (2)(h)(7)(C)(iii).

jurisdictional scope of the Dodd-Frank Act is limited in its reach with respect to foreign entities. Third, the imposition of margin requirements on foreign sovereigns would have a serious anti-competitive impact on U.S. swap entities in relation to their foreign competitors. Assuming non-U.S. jurisdictions create margin rules, foreign regulators are unlikely to apply onerous margin requirements to transactions with their sovereign. Recent discussions within Europe indicate a difference between the European Union ("E.U.") approach and the U.S. approach. For example, in a recent letter from the senior officials of the European Central Bank ("ECB") to the Commission and the SEC, the ECB asks the commissions to exclude from the definition of "swap" and "security-based swap" any agreement, contract, or transaction in which one counterparty is a public international organization, such as the ECB, or a national central bank of a market economy. [26] If the E.U. excludes such entities from its margin requirements while the U.S. margin rules capture such entities, U.S. swap entities will be placed at a severe disadvantage in competing for the business of sovereign counterparties.

Special Purpose Vehicles ("SPVs") - In addition, SPVs for structured finance or securitization transactions should not be FEs and should generally be excluded from margin requirements. There are a number of other ways in which credit risk can be, and currently is, mitigated in transactions with SPVs. For example, the documentation for SPVs generally provides that: (i) the swap counterparty has a security interest over all the assets of the SPV; (ii) the swap counterparty stands at the top of the "waterfall" of cash flows (thereby having first priority with regard to cash flow payments); and (iii) SPVs are bankruptcy-remote vehicles. Hence, there is no need to impose margin requirements to protect against credit risk. Further, as stated in the ISDA comment letter on the further definition of MSPs and MSBSPs, SPVs have limited functionality and resources and are generally unable to comply with the burden of requirements to post collateral.[27] Imposing margin requirements on SPVs would generally prevent SPVs from entering into swaps which would deprive securitization and structured finance of a valuable hedging tool.

U.S. State and Municipal Governmental Entities ("SMGEs") - The CFTC Proposal specifically requests comment as to whether the proposed rules require clarity with respect to the treatment of U.S. federal, state or municipal government counterparties. We respectfully recommend that the Commission classify SMGEs as exempt from margin requirements for the following reasons. [28] First, SMGEs may be legally barred by state constitutional and statutory debt principles from posting collateral. [29] Even if not barred from posting collateral, SMGEs are frequently constrained, and, in certain cases, prohibited, by applicable law and under existing

[26] Letter from Daniela Russo, Director General, Directorate General Payments and Market Infrastructure and Antonio Sainz de Vicuna, General Counsel, Directorate General Legal Services to Ananda Radhakrishnan, Director of Clearing and Intermediary Oversight, CFTC, and James Brigagliano, Deputy Director, Division of Trading and Markets, SEC, dated May 6, 2011.

[27] See ISDA comment letter re: Joint Proposed Rule: Further Definition of "Swap Dealer," "Security-Based Swap Dealer," "Major Swap Participant," "Major Security-Based Swap Participant" and "Eligible Contract Participant" (CFTC RIN 3038-AD06; SEC RIN 3235-AK65; SEC File No. S7-39-10), dated February 22, 2011, p. 16.

[28] See SIFMA comment letter re: Proposed Rules for End-User Exception to Mandatory Clearing of Swaps (CFTC File RIN: 3038-AD10 and SEC File: No. S7-43-10), dated February 22, 2011, regarding the applicability of the End-User Exception to Mandatory Clearing to State/Local Governmental Entities.

[29] See State ex rel Kane v. Goldschmidt, 308 Ore. 573 (discussing the creation of debt within the meaning of Or. Const. art XI, § 7.; Brown v. City of Stuttgart, 312 Ark, 97; (discussing the creation of debt within the meaning of Ark. Const., art. 16 § 1).

credit agreements, from posting collateral in support of their swap obligations. In addition, for many SMGEs, the posting of collateral is subject to the limitations of pre-existing indenture pledges and covenants to bondholders or credit agreement lien covenants.

Second, the terms of swaps entered into by SMGEs are specifically tailored for the relevant legal requirements. The terms of municipal market swap transactions are affected by, if not mandated by, applicable U.S. federal tax law,[30] state and local law and other policies and financial specifications for the relevant SMGE. SMGEs typically enter into interest rate swaps with the expectation that swaps will remain outstanding to term; and do not typically trade in and out of positions. As a consequence, the payment provisions of municipal market swaps, including collateralization requirements, if any, are carefully considered and are typically specially tailored to comply with legal and documentation requirements.

Third, SMGEs may not be in a financial position to post collateral. SMGEs do not carry large cash balances, borrowing on a "revenue" basis with the financing structures typically producing limited amounts of excess cash.

Lastly, SMGEs' continued execution of swaps that are not subject to a margin requirement will neither increase systemic risk nor compromise stability. Municipal market swaps are used for limited, specialized purposes—to offset or hedge payment obligations by SMGEs in connection with their debt issuances—and are expected to remain outstanding to term. Municipal market swaps are intended to be non-speculative: state statutes frequently forbid speculation in swaps by SMGEs; in addition, policies, resolutions and agreements of SMGEs customarily prevent speculation.[31] While the market for municipal swaps is robust, the incidence of default is low as most SMGEs are highly creditworthy and the notional volume of municipal market swaps is a relatively small piece of the broader interest rate swap market.

4. Margin requirements should only apply to the relevant asset class for any CSE.

The margin requirements should state that a CSE for an asset class is subject to the CSE margin requirements for that asset class only. For example, if a CSE is registered as a dealer for equity swaps, then the margin rules should only apply for equity swaps of such dealer.

[30] Treasury Regulations § 1.148-4(h) permits a tax exempt bond issuer to integrate swap payments and receipts with payments made on the hedged bonds in some circumstances. These regulations are complex but, in very general terms, require that the timing, source and payments on the swap closely correspond to the payment on the bond.

[31] For example, in North Carolina, "no governmental unit shall enter into a swap agreement . . . other than for the primary purpose of managing interest rate risk on or interest rate costs of its obligations." N.C. Gen. Stat. § 159-194 (2010). See, e.g., U.S. Municipal Counterparty Schedule to the Master Agreement (for use with the 1992 ISDA Master Agreement (Local Currency – Single Jurisdiction).

IV. Margin Requirements

1. Initial margin model

(a) The rules should include proprietary models as eligible initial margin models.

The proposed rules limit the eligible models to models that are either (1) currently used by derivatives clearing organizations ("DCOs"); (2) currently used by an entity subject to regular assessment by a Prudential Regulator; or (3) a vendor model available for licensing.[32] We strongly urge the Commission to also permit proprietary margin models. Many CSEs have sophisticated margin models that have been tested through extended and continuous use in active markets. These models are an effective means of risk management and the market would suffer if CSEs could not use them.

The Commission states that it is constrained in reviewing models because of limited resources. However, there will be less demand for the Commission's resources in reviewing models if the Commission accepts models approved by foreign regulators, the SEC and Prudential Regulators, as suggested below. In addition, the Commission should not establish requirements that will favor some CSEs relative to others. The rule as proposed would create a competitive disadvantage for those CSEs that use proprietary models that are not subject to regular assessment by a Prudential Regulator. We respectfully request that the rules permit the use of proprietary margin models if they comply with the model standards set forth in the rules.

(b) The margin rules should permit initial margin models based on risk measures other than VaR.

A CSE should be allowed to use risk measurement methodologies other than VaR for the calculation of initial margin. Because all models are subject to regulatory approval, the relevant regulator will have a chance to review any methodology chosen by a CSE.

One example of a commonly-used risk measurement method other than VaR is stressed-based modeling. Stress-based models combine margin requirements associated with multiple risk factors to arrive at an overall portfolio margin number. For a credit default swap ("CDS") portfolio, for example, risk factors might include broad based spread widening/tightening, sector based widening/tightening, curve risk, and jump-to-default risk. Shock levels are then calculated for each risk factor, calibrated to a given confidence level and holding period. These shock levels are used to compute the margin level associated with each risk factor.

The margins for each risk factor are then aggregated to come up with a total margin requirement for the portfolio. Frequently an aggregation method is used that combines risk factors at varying severity levels to form a risk scenario. Several different such risk scenarios are defined, and the scenario that has the maximum margin requirement for the client's portfolio is used. For example, some risk scenarios for a CDS portfolio could be:

[32] CFTC Proposal §23.155(b).

Scenario (a): Broad based spread widening of 40% + Curve steepening of 10% + Largest sector spreads widening by 200% + 1 largest single name jumping to default

Scenario (b): Broad based spread widening of 30% + Curve steepening of 15% + Largest 2 sector spreads widening by 75% + 2 largest single names jumping to default

Stress-based models are commonly used in prime brokerage, and dealers may reveal their proprietary stress parameters to clients subject to non-disclosure agreements. Since stress-based models are less complex than VaR models, it is easier for clients with knowledge of the model parameters to replicate the results of a stress-based model.

Another example of a widely used risk measurement method is the measurement of the counterparty's margined exposure profile over the life of the transactions of the counterparty's portfolio. This method measures the potential increase in the value of the portfolio, at a specified confidence level, over a large set of margin periods of risk over the remaining life of the counterparty's portfolio, assuming no additional trades. This approach is used to calculate the counterparty's expected positive exposure profile ("EPE"), under the internal model method of Basel II and should be permitted for the calculation of initial margin.

Stress-based modeling and exposure profile methodologies are just two examples of alternative methods that should be permitted for initial margin models. Models based on other valid risk methodology that satisfy robust standards should also be permitted. The Associations and their members would be happy to work with regulators to develop appropriate standards. A discussion of different types of model methodologies, including Value-at-Risk ("VaR") and exposure profile, is provided in Annex II.

(c) The relevant liquidation horizon should be determined by the CSE under its risk management policies.

Under the CFTC Proposal, the liquidation horizon (i.e., the time horizon over which the change in the value of a derivative portfolio is calculated for the purpose of setting initial margin) is set at ten days.[33] This is considerably longer than the liquidation horizon typically set by DCOs and by banks themselves, which are generally between 2 and 5 days. The CFTC Proposal does not explain why the liquidation horizon is set at twice that for DCOs. There is no reason to believe that the dealers will generally have more difficulty than DCOs in closing out their positions. Dealers have ready access to the market and dealers have considerable flexibility in closing out their positions: in addition to selling their positions, they can enter into offsetting positions or dynamically hedge using economically similar contracts or take other steps. CSEs should be able to set the liquidity horizon based on their risk management policies which will be subject to review by regulators.

[33] CFTC Proposal, Section 23.155(b)(2)(vi).

(d) Initial margin models should be operated on a dynamic, not static, basis, thereby eliminating the need for calibration to a "period of significant financial stress."

It is not entirely clear whether the proposal contemplates that CSEs' initial margin models will be operated on a dynamic basis, so that the amount of initial margin is calculated based on a rolling look-back period. Calculating initial margin on a dynamic basis means that the potential replacement cost/liquidation cost of a fixed portfolio may change as the magnitude and the volatilities and correlations of market factors observed in the rolling look-back period changes. We strongly recommend that a CSE be permitted to operate their models on dynamic basis for the following reasons: (i) it is consistent with the DCO's use of margin models, which are dynamic and use a rolling look-back period; (ii) it is impossible to determine what static level will be high enough to cover a future period of financial stress, and predictions based on historical data are often unreliable; (iii) while the use of a dynamic rather than a static basis of calculating margin might result in increased margin requirements during periods of stress, and could have pro-cyclical effects, such increased margin requirements may be appropriate.

Such a dynamic model should not be required to incorporate a "period of significant financial stress".[34] First, the time period used for calculation will change over time and the models will capture trends in the market. Second, the concept of "period of significant financial stress" is undefined and very difficult to pre-determine. [35] Third, requiring calibration to a particular time period would defeat the purpose of a dynamic model, which is to continue to use new information as it becomes available.

(e) The proposed model standards are unduly restrictive.

The proposed rules set forth various standards with which initial margin models must comply.[36] The set of standards is too restrictive on the whole and specific standards, as described below, are problematic.

Independent third party - The proposed rules require that models must be validated by an "independent third party" before being used and annually thereafter. [37] We oppose this requirement. The CFTC Proposal does not provide the rationale for requiring annual model review nor does it provide information as to who would qualify as an "independent third party", how and by whom such entity will be selected, and the ramifications should a model fail a subsequent validation review. We do not believe there is a need for additional third party review, the model will be subject to regulatory approval, on-going regulatory review and the CSE's own risk management processes.

[34] CFTC Proposal, Section 23.155(b)(2)(iv).

[35] The difficulty in defining this concept is partly recognized in the CFTC question which asks about a period of significant financial stress with a longer historical data sample (such as 10 years) as an alternative to selecting a period of financial stress. (See CFTC Proposal, 76 Fed. Reg. 82 at 23741). However, we do not think such an alternative solves the selection difficulties as the time between financial crises or periods of significant financial stress is unpredictable and often longer than 10 years.

[36] CFTC Proposal, Section 23.155(b)(2).

[37] CFTC Proposal, Section 23.155(b)(2)(vii).

Monitoring and back-testing - The proposed rules also require daily monitoring of margin coverage and monthly back-testing and stress-testing.[38] The margin rules should not impose rigid standards on the margin calculation and monitoring process. Rather, the rules should be flexible to allow the risk management process to be appropriately structured based on the CSE's risk management practices and its transactional volume, exposure and other entity-specific risk factors.

DCO standard - The proposed model standards also require that "[i]f an uncleared swap or portfolio is available for clearing by a [DCO] but is not subject to mandatory clearing, the model shall include a factor requiring that that initial margin shall be equal to or greater than an amount that would be required by the [DCO]."[39] We oppose this requirement based on policy rationale and feasibility. The models will have been chosen or developed by a CSE and approved by the Commission. Having undergone rigorous development, testing and review processes, the models should not be further subject to having to match results from DCO models which have been developed under different standards, algorithms and assumptions. Further, such a requirement may not be feasible. In order for the model to set a floor at the DCO margin level, the CSE must be able to determine the DCO's requirement for an individual swap. Such information may not be available: the DCO may not volunteer how much margin would be required for a swap it does not clear and, in addition, DCO initial margin models calculate margin on a portfolio basis, not a trade-specific basis.

(f) The "alternative method" (as specified in §23.155(c)) should not be based on the margin required by DCOs for cleared swaps or futures.

The CFTC Proposal states that if an appropriate model is not used, initial margin is calculated pursuant to an "alternative method" that is linked to the margin required by DCOs for cleared swaps or futures. We strongly oppose this method of determining initial margin. First, in many cases there will be no cleared swap or futures that approximates the relevant uncleared swap. Second, even if a cleared swap or futures has some similar economic terms to an uncleared swap, the exposure generated by the uncleared swap as economic conditions fluctuate might differ significantly from the exposures generated by the cleared swap or futures. As a result, the relevant initial margin amounts should differ. Third, the multipliers proposed by the Commission are based on differing liquidation time horizons for DCOs and CSEs.[40] However, as discussed above, there is no reason to require a 10 day liquidation time horizon for a CSE, because CSEs have ready access to the market and flexibility in closing out positions. The relevant liquidation time horizon for a CSE will differ significantly depending on the type of swap and the relevant market.

(g) The Commission should permit margin models approved by foreign regulators and the SEC and accept margin models approved by the Prudential Regulators.

Margin models approved by foreign regulators should be permitted, following the principle of international comity as expressed in Section 752 of the Dodd-Frank Act. Other regulation

[38] CFTC Proposal, Section 23.155(b)(2)(ix) – (xi).
[39] CFTC Proposal, Section 23.155(b)(2)(xiii).
[40] See discussion of the proposed multipliers - CFTC Proposal, 76 Fed. Reg. 82 at 23737-8.

accepts the use of models approved by other regulators: for example, valuation models approved by foreign regulators are allowed. If there is no deference, and foreign regulators do not agree with the model approved by the Commission or the margin rules in general, then foreign financial institutions would potentially be shut out of the U.S. market, resulting in less liquidity, less competition and greater costs.

Accordingly, we urge the Commission to liaise with foreign regulators in order to develop an effective harmonized international framework. Diverse and inconsistent requirements between different supervisors will increase costs and make it less likely that robust international standards can be developed. Close international cooperation between various supervisory bodies including banks, supervisors, systemic risk supervisors and supra-national standard-setters would mitigate these risks.

Also, the rules should recognize models approved by the Prudential Regulators or SEC. The financial system will be best served by coordination among regulators. In addition, if the Commission does not recognize models approved by other regulators, a significant burden will be placed on entities that need to obtain approvals from foreign home regulators, the CFTC, the SEC and potentially also the Prudential Regulators.

2. Netting of variation margin should include security-based swaps as well as swaps. CSEs should be permitted to net any exposures (including exposures under products that are not swaps), if netting is legally enforceable, for purposes of determining initial and variation margin. CSEs should be permitted to offset variation margin requirements with initial margin, and initial margin requirements with variation margin.

Security-based swaps – The CFTC Proposal provides that CSEs may calculate and comply with the variation margin requirements on an aggregate basis with respect to all uncleared swaps under a single CSA, provided all such swaps are in compliance with the margin requriements.[41] The final rules should clarify that the permitted netting of variation margin includes security-based swaps. We see no reason to distinguish between security-based swaps and other swaps for purposes of netting.

Legally enforceable netting - In addition, CSEs should be permitted to net swaps against any other exposures (including exposures under products that are not swaps) if such netting is legally enforceable. As more fully described below, netting is a critical risk reduction tool that is widely used in the market and that has been recognized by regulators. If netting of a wide range of transactions is legally enforceable, there is no reason to limit netting to swaps. The regulations should encourage broad-based, legally enforceable netting as a valuable means of reducing systemic risk. Failing to recognize netting for margin purposes will create less incentive for parties to use netting to reduce risk.

Initial and variation margin - Also, the rules should expressly allow offsets of initial and variation margin that is not segregated, for all transactions. The arrangement for such offsets would be subject to the prudent risk management of the CSE, which is in turn subject to review

[41] CFTC Proposal Sections 23.152(b)(3), 23.153(b)(5) and 23.154(b)(5).

by the regulators. Margin determined in this way more accurately reflects the credit risk that exists between the parties.

Alternative method – In addition, for the alternative method, Section 23.155(c)(2) generally prohibits netting across asset classes. We strongly oppose this limitation on netting.

3. The Commission should permit margin models that provide for portfolio-based margining across cleared and uncleared swaps and other products and across legal structures.

Portfolio-based margining across a broad set of products and legal structures is critical for a functioning marketplace. Market participants routinely hedge their portfolios to reduce risks. CSEs should be able to use portfolio-based margin models for swaps so long as a CSE has a well-founded legal basis to conclude that it is able to offset its exposures, whether across asset classes of swaps, between cleared and uncleared swaps, between swaps and other products (options, futures, repo, margin lending, etc.), across legal entities and under prime brokerage arrangements and master margining agreements. This behavior improves a participant's overall risk profile and the effect should be reflected in the reduction of initial margin required to support the portfolio. Recognition of portfolio-based margining will encourage counterparties to hedge their portfolios with their core swap dealer counterparties, introducing additional market stability and reducing systemic risk. Failing to recognize portfolio-based margining will impose significant additional costs on swaps and make markets less liquid. Portfolio-based margining requires both recognition of netting (if legally enforceable) and cross-margining. Cross-margining is discussed separately under Section V(1) below.

The reality of the market place is that many products and their hedges cross traditional product silo definitions (e.g., convertible bonds), often involve multiple swap dealer legal vehicles, and bridge cleared and OTC transactions and markets (e.g., swaps vs. swaptions, foreign exchange ("FX") and precious metals trading through futures, exchange traded funds and OTC). Commodity swaps are also routinely hedged with commodities and equity swaps/options are hedged with listed futures/options. Markets will continue to evolve to include new product types and new structures. Regulations should include the flexibility to recognize legitimate hedges, and require appropriately scaled initial margin. In particular, as swaps migrate to central clearing, we will continue to see the need for cleared products to hedge more complex transactions that will remain in the OTC marketplace, and such portfolio margining should be recognized to the extent legally enforceable.

Regulatory barriers to recognizing risk offsets will have the unintended consequence of eliminating effective hedging opportunities and even penalizing responsible hedgers. The discussion about offsets should focus on whether portfolio margining of particular swaps and other financial transactions is legally enforceable and whether particular initial margin models are sufficiently robust. It should not focus on the particular asset class of the swap. Finally, even though FX forwards and FX swaps are not "swaps" as defined under the Dodd-Frank Act, portfolio margining benefits should be applied to such transactions.

Effective portfolio-based margin methodologies will continue to be critical for market participants. It is essential that regulations encourage responsible portfolio management while

recognizing the economic reality of the marketplace and the practical needs of market participants. These proposed regulations would increase costs associated with hedging, adding further inefficiencies for market participants.

Key examples of transaction sets where risk offsets should be reflected in initial margin requirements if there is a well founded legal basis:

i. Cleared vs. non-cleared transactions within asset classes
ii. Transactions across asset classes
iii. Transactions governed by ISDA and other underlying agreements
iv. Transactions executed across different legal vehicles

Cleared vs. non-cleared transactions within asset classes – For example, it is standard market practice to use interest rate options to cap losses in a swap portfolio. As a growing percentage of interest rate derivatives continues to migrate to clearing, prudent risk management practices would call for allowing cleared products to be used to hedge more complex OTC transactions.

Transactions across asset classes – The need to cross product categories is the unavoidable practical reality in the market place today and will remain as such in the future. Market participants frequently trade across product categories to utilize a variety of effective hedges. We feel strongly that the discussion on acceptable portfolio-based margining approaches should focus on sources/types of risk, their appropriate capture and quantification as opposed to relying on traditional asset class limitations. Eligibility of a particular product should be determined primarily by its sources of risk being properly accounted for and quantified within an adopted portfolio-based margining approach, including any new product-specific add-ons such as liquidity, idiosyncratic risk(s), etc. Market participants could hedge a portfolio with several transactions. It will be important for both the portfolio and the set of hedges to be considered as part of the same set of transactions. For example, a variety of CDS and interest rate hedges may be used for a total return swap with investment grade and high yield bonds.

Transactions governed by ISDA and other underlying agreements - A primary consideration for hedging is the ease/economics of executing hedges. Segmenting risk by underlying agreement type will increase the costs of hedging and reduce liquidity within market sectors. A common example of hedges crossing product agreements is reducing the Interest Rate risk component of a high-grade corporate bond in a financing transaction by hedging with highly liquid government bond futures. So long as the CSE has a well-founded legal basis to conclude that the transactions conducted under each set of documentation may be offset (e.g. as a result of a master netting agreement that allows netting cross agreement), such positions should be allowed to be margined on a portfolio basis for margin calculation purposes.

Transactions executed across swap dealer legal vehicles - The current legal structure of several leading swap dealers in the marketplace includes execution of transactions across multiple legal vehicles/ affiliates. If proposed regulations further restrict netting or portfolio margining of transactions across legal vehicles, it would discourage effective and responsible hedging by market participants.

Initial margin collateral held by clearing houses and exchanges, custodians, and swap dealers should be recognized as offsets to portfolio-based requirements. If clearinghouse minimums exceed the portfolio-based initial margin requirements for a given set of transactions, swap dealers should be permitted to recognize this excess collateral to reduce other regulatory minimum margin requirements.

Over time, there will be a continued migration of portfolio constituents to clearing venues. Until a critical mass of transactions becomes clearing-eligible at centralized venues, swap counterparties will use OTC transactions to hedge their exposure. Because clearing house initial margin requirements will not be able to recognize the effects of clients' OTC hedges, the total required collateral would be unnecessarily high and not reflect that actual risk of the portfolio of the cleared and OTC transactions. Effective portfolio-based margining by swap dealers across a broad set of transactions would temporarily replace a portion of the unintended liquidity loss driven by pending regulations.

4. Thresholds

(a) CSEs should be responsible for establishing applicable thresholds for all counterparties, subject to regulatory review.

The rules should not set thresholds by counterparty type. Such an approach does not appropriately reflect the risk posed by specific counterparties. Instead, CSEs should be able to use models that are able to measure individual counterparty risk and assign thresholds in a manner that reflects the distinctions between counterparty types as set forth by the Commission. The rules should also provide that the thresholds be subject to review by the regulators to ensure that the thresholds are being appropriately determined and implemented. This approach would make CSEs responsible for determining appropriate thresholds, a function for which they are best positioned, subject to the check of regulatory review.

(b) The rule should provide that, for purposes of calculating margin, the threshold should be subtracted from the applicable margin amount.

The CFTC Proposal is not entirely clear as to how the thresholds will apply to margin calculations. The rules should specify that the amount of initial and variation margin to be collected by the CSE is the amount of margin otherwise required *less* any applicable threshold amount. By way of comparison, this is the method of applying the threshold specified in the PR Proposal.[42]

5. Transactions between Swap Entities

(a) There should be no initial margin requirements for transactions between Swap Entities.

The Dodd-Frank Act requires that the Commission specify initial margin requirements for CSEs, but there is nothing in the language of the Dodd-Frank Act that establishes the level or amount of initial margin required. There is also nothing in the language of the Dodd-Frank Act that

[42] PR Proposal §§_.3(a)(2) and _.4(a)(2).

mandates that the same initial margin requirements must be imposed for different categories of counterparties. The Commission is therefore not under any statutory mandate to set specific initial margin requirements. The requirements applicable to transactions between Swap Entities therefore could be different than those required for other counterparties.

We recommend a zero regulatory minimum requirement for initial margin between Swap Entities. Initial margin cannot be considered in isolation, and the interconnectedness between initial margin, regulatory capital and robustness of the operational margin process should be taken into account. Collateral and capital both provide a pool of assets to which a firm suffering a counterparty default loss will have recourse. Although determined and regulated in different ways, capital and collateral must be considered together as composite risk mitigation; more specifically, the role of variation margin provides protection against loss of the current mark-to-market value of a portfolio of derivatives, combined with regulatory capital to provide protection against additional unexpected loss that can arise between the time that the last delivery of collateral is obtained and the moment that the defaulted portfolio is terminated and the loss crystallized. Existing and future regulatory capital rules impose robust requirements both for the amount of capital that must be held to protect against this risk, and also for the degree of legal certainty that must exist for netting and collateral agreements. The combination of variation margin plus regulatory capital therefore provides composite risk mitigation for both expected and unexpected loss. Further, requiring initial margin in addition to variation margin and regulatory capital would appear to double up on one or both of these protections, and is not warranted by any other risk. The operational margin process employed by CSEs is robust and proven. Collateral agreements permit margin calls to be made daily and operational procedures ensure that this is done whenever unsecured exposure exists. CSEs have implemented improved market best practices for collateral management, including notably in the area of dispute resolution, which is materially better handled today than it has been in the past; dispute statistics provided to supervisors by their regulated firms bear out the improvements that have been made. Therefore, we respectfully submit that a combination of daily variation margin, robust operational procedures, legally enforceable netting and collateral agreements, plus regulatory capital requirements provide comprehensive risk mitigation for collateralized derivatives, and that any additional initial margin requirements for swaps between Swap Entities would be unnecessary and unwarranted.

The following precedents exist for not imposing any initial margin requirements on trades between Swap Entities: (1) broker-dealers are “exempted borrowers” under Regulation T (of the margin rules issued by the Federal Reserve) and permitted to extend credit and to transact with one another on any terms they deem appropriate; and (2) the "good faith" requirement for non-equity securities under Regulation T. These approaches were deemed by regulators not to disrupt the safety and soundness of regulated broker-dealers and are beneficial to the system because they increase the liquidity of these entities.

In addition imposing segregated initial margin requirements on trades between Swap Entities would result in a tremendous cost to the financial system in the form of a massive liquidity drain.

There is a cost of requiring too much collateral. Since initial margin is over-collateralization beyond the actual mark-to-market exposure between the parties, it is important that collateral requirements not be excessive, but calibrated appropriately under the context of the operational

environment and regulatory capital regime. Any perceived benefit of having more collateral than is necessary does not outweigh the risks posed by the liquidity drain on the system by forcing Swap Entities to post and segregate initial margin.

(b) Segregation of initial margin – If, despite the discussion above, initial margin is required for swaps between Swap Entities, the rules should not require segregation of such initial margin.

Segregation of initial margin between Swap Entities in the manner anticipated by the rules introduces significant costs in most cases, particularly when combined with the limited investment options for such segregated initial margin, and is not required by the Dodd-Frank Act. We therefore oppose the requirement that a CSE needs to segregate collateral posted by a Swap Entity.

Statutory background - Nothing in the Dodd-Frank Act requires the use of segregated accounts for margin posted between Swap Entities. The Dodd-Frank Act provides that a CSE must notify its counterparty that the counterparty has the right to ask for segregation of collateral. [43] Imposing a requirement that collateral must be segregated in all cases, regardless of the wishes of the parties, seems to go beyond the intent of the Dodd-Frank Act.

Cost implications – There are significant cost consequences that will result from imposing collateral segregation requirements between Swap Entities. First, because the collateral cannot be rehypothecated, and because the collateral amounts will be very large, CSEs will be limited to investing very large amounts of eligible collateral in assets that generate low returns. If segregation is imposed, the rules should expand eligible collateral to include higher yielding instruments. Second, there are additional expenses in maintaining collateral in segregated accounts. Segregation will compel the establishment of a large number of new custodial accounts, for which there are legal and operational costs. Further, there will be a surge of new account applications at the onset that could result in backlogs and delays that may hamper market liquidity. There are additional costs associated with transferring securities into segregated accounts, such as transfer fees, settlement time and settlement risk.

While counterparties may opt for segregated accounts for the higher level of protection they afford, and indeed some already do so as a matter of industry practice, a mandate on CSEs to segregate collateral of Swap Entity counterparties would be burdensome.

Documentation issues – Segregation requirements may also pose a serious issue with regard to existing documentation for collateral and in particular for the English law credit support annex published by ISDA (the "English CSA"). English CSAs account for over half of the collateralized OTC market globally. The English CSA is based on the concept of outright title transfer so that the collateral holder has full ownership rights over the collateral. The proposed restrictions on collateral (e.g. no rehypothecation, mandatory segregation) will subject English CSAs to the risk of challenge and re-characterization as improperly documented and unperfected security interest agreements. Such unintended consequences would raise significant issues for such agreements. This could have very serious negative economic consequences globally as all

[43] Dodd-Frank, Section 724 (new Commodity Exchange Act ("CEA") Section 4s(l)); Section 763 (new Securities Exchange Act Section 3E(f)).

firms would be required to re-evaluate their collateral reserves. Replacing the English CSAs with other credit support agreements would be very time-consuming and expensive.

Cash collateral – Typically, in order to be segregated, cash collateral needs to be invested in securities or other financial assets. If the intention of the regulators is that cash can be re-invested and that the re-invested securities can be segregated, then the regulators should include as eligible collateral a short term investment vehicle into which funds can be swept and withdrawn on a regular basis, such as a money market fund or bank deposit. We ask that the Commission clarify the issue of segregation of cash and allow money market funds and bank deposits as eligible collateral.

(c) The rules should not require a CSE to offer to segregate variation margin.

It is not clear whether the proposed rules provide that a CSE must offer to segregate variation margin. Section 23.158(a)(2) provides that a CSE must offer each counterparty the opportunity to select an independent custodian. This offer is not limited to initial margin. For FEs, use of a custodian results in a requirement that collateral may not be rehypothecated. Section 23.158(b).

The rules should make it clear that a CSE is not required to offer to segregate variation margin. The Dodd-Frank Act provides that SEs must offer to segregate initial, and not variation, margin. A regulatory requirement that they make such an offer for variation margin goes beyond the intent of the statute.

In addition, segregation of variation margin would add little benefit of risk mitigation, yet would significantly reduce liquidity in the market. The purpose of variation margin is to protect a party who is owed money under swap contracts with a counterparty. Unlike initial margin, which always represents an over-collateralization above and beyond the actual mark-to-market exposure between the parties, and therefore creates additional risk for the delivering party, in the case of a party delivering the variation margin this over-collateralization risk is significantly reduced because of close-out netting under the Bankruptcy Code and common law set-off rights (where applicable). If a party were to deliver variation margin to its counterparty who then defaulted and did not return that variation margin, the delivering party has recourse to the simple remedy of not paying the amount they owe under the swaps contract. By definition, this will be comparable to the amount of variation margin (subject to timing differences and differences resulting from pricing relative to the bid-offer spread). Thus, because of netting there is no need to afford additional protection to variation margin by requiring that segregation be offered to all counterparties.

(d) The rules should not bar rehypothecation of unsegregated initial margin collected and held by a CSE.

The proposed rules provide that, upon receipt of initial margin from a counterparty, a CSE may not post such collateral as margin for a swap, security-based swap, commodity for future delivery, a security, a security futures product or any other product subject to margin.[44] We see no reason for this restriction where the collateral is not required to be segregated. Banning

[44] CFTC Proposal §23.158(b)(2).

rehypothecation would effectively require the segregation of all initial collateral, which is clearly beyond the intent of the Dodd-Frank Act and of the CFTC Proposal, as we understand it. Disallowance of rehypothecation in such a situation unnecessarily drains liquidity from the marketplace. In addition, it is not clear how such a requirement would apply to cash collateral because it is generally not feasible to prevent re-use of cash.

(e) The rules: (i) should not require the use of a custodian that is unaffiliated with the CSE; (ii) should not require that the custodian be in the same insolvency jurisdiction as the CSE; and (iii) if a specific insolvency jurisdiction is required, the rules should clarify that it is the insolvency jurisdiction of the CSE, not the party posting the collateral; (iv) should not require indemnification of custodians.

Independent custodian – The proposed rules provide that the custodian must be independent of the CSE. We interpret this to mean that the custodian may not be affiliated with the CSE. The requirement is not justified by credit risk mitigation; will reduce competition in the custodial market; and impose significant costs and burdens on the CSEs. Taking each of these arguments in turn: first, the requirement will not reduce credit risk because property held in custody by banks or others in the United States (and many other legal regimes) is not the property of the custodian. Thus, even if there is a danger that an insolvency of the custodian will occur at the same time as the insolvency of an affiliated CSE, the assets held as collateral will not be lost to the pledgor. The regulators can address potential credit risk by providing that a custodian is only eligible if it is located in a jurisdiction in which property held in custody is not property of the custodian.

Second, requiring use of the independent custodians will reduce competition among custodians. Because custodial activities are very heavily technology-dependent, the custody business in the United States is already concentrated in a few institutions. Requiring use of independent custodians will inevitably drive a very significant amount of business to the few large institutions that are capable of handling high volumes.

Third, as discussed above, the expense of mandatory segregated accounts for all CSE transactions will be very high. If CSEs are required to use independent custodians, in a market which is relatively concentrated, the costs will be even higher. In addition, the operational burdens of interacting with a relatively small number of third party custodians will be very significant, especially in the first few years as the rules are implemented.

Same insolvency jurisdiction – We see no reason why the custodian should be in the same insolvency jurisdiction as the CSE. The critical legal issue for the insolvency of any custodian, as described above, is that property held in custody should not become the property of the custodian. Whether or not the custodian is in the same jurisdiction as the CSE will have no bearing on this issue. In addition, by requiring use of custodians in a specific jurisdiction, the regulators further limit the universe of available custodians. Finally, for cross-border trades with certain regions, it may by more efficient to concentrate all custodial activities in one place, and the rule as drafted would prevent this. For example, for all transactions with registered CSEs located in Europe, the rules should allow the CSEs to employ custodians located in London, rather than require the use of custodians in the CSEs' home country.

We also request that if the jurisdiction requirement is adopted as proposed, the Commission clarify that for purposes of the margin requirements, the United States is considered to be in one insolvency jurisdiction despite the fact that banks and systemically important non-banks and other institutions may be subject to potentially different insolvency regimes. For example, there is no reason to prevent a U.S. non-bank CSE from using a U.S. bank as custodian.

Ambiguity as to insolvency regime of CSE - The proposed rules as written leave some ambiguity as to whether the custodian must be in the same insolvency jurisdiction as the party posting collateral or the party collecting collateral. Section 23.158(a)(3) refers to the margin *collected by* the CSE from a SE counterparty and held at an independent custodian. Section 23.158(a)(4) next refers to the margin *posted by* the CSE to a SE counterparty and held at an independent custodian. Section 23.158(a)(5) provides that the custodian shall be located in the same insolvency regime as would apply to the CSE, without specifying whether is the CSE that is collecting or posting the collateral. The relevant insolvency regime should be that of the collecting entity for the following reasons. First, we see no policy reason at all for a requirement that the custodian be in the same insolvency regime as the party posting collateral; second, requiring the use of a custodian subject to the same insolvency regime as the entity posting collateral would mean that a single CSE would potentially have to enter into multiple custodial arrangements, significantly increasing operational difficulties; third, for many counterparties, particularly outside the U.S., there may be no suitable custodians that are subject to the same insolvency regime as the counterparty, thereby making such transactions impossible.

Indemnity - The rules should not require an indemnity of a custodian by a party certifying that it is entitled to control of margin (and to whom such margin is released) against any claims that the margin assets should not have been released. This and other contractual agreements should be determined by the parties. Indemnification of the custodian does not need to be addressed by margin requirements that are intended to reduce systemic risk.

6. The rules should not require the CSEs to calculate hypothetical initial and variation margin.

The CFTC Proposal requires CSEs to calculate hypothetical initial margin for NFE counterparties and hypothetical variation margin for FE and NFE counterparties. We see no benefit to requiring such calculations and there will be significant operational costs in making such calculations. We recommend that the Commission remove this requirement from the rules.

V. Eligible Collateral

1. The constituents of eligible collateral should be determined by the CSEs, including any haircuts and cross-margining.

The proposed list of eligible collateral is overly conservative and its stringent limitations present a number of potential issues. Constraining eligible collateral to cash, U.S. Treasuries and senior GSE obligations would create an exaggerated demand on treasury and agency securities. This would have a direct and artificial impact on the repo markets and related rates, and increase the risk of short squeeze situations arising. Demand will also be amplified by the imposition of margin requirements on those inter-affiliate trades on which margin is not currently collected. In

addition, assuming that a significant portion of this collateral would have to be segregated, this may add systemic risk by concentrating holdings of Treasury and agency securities. Finally, many clients have preferences for certain types of collateral as a function of availability and cost and the rules should seek to accommodate the counterparties.

We propose that CSEs be permitted to determine the collateral that is eligible for posting and determine the relevant haircuts and currency of such collateral. Such determinations should take into account issues of enforceability and liquidity, and be consistent with the Basel recommendations. Specifically, the type of collateral collected for initial and variation margin and the relevant haircuts would be subject to the review of regulators. Further, the rules should allow the inclusion of margin posted for other transactions, including cleared swaps, as long as the CSE has a valid security interest in such margin. Such rules should allow a CSE to choose non-traditional collateral if such collateral is effective credit support for a particular swap. For example, interests in oil and gas may qualify as eligible collateral for swaps on oil and gas.

It should be noted that 82% of all collateral in circulation in the OTC derivative market consists of cash. [45] Of the remainder, the majority is in the form of high quality, liquid securities typically issued by sovereign entities or related agencies. The very small proportion of collateral which does not constitute cash or government securities is generally taken in a very specific context where the particular client or transaction circumstances warrants other forms of collateral (for example, energy related transactions, covered call options, etc). Irrespective of its relative share of total collateral, non-cash collateral is significant in absolute dollar terms and crucial to the operation of OTC derivatives markets. For example, non-cash collateral is important for prime brokerage and financing arrangements with corporate end-users. The industry therefore has established deep expertise on the selection of situation-appropriate collateral assets, and the specification of risk-appropriate haircuts. Firms generally have strong policies in place for collateral selection and valuation, with governance structures to address exceptions and unusual situations. In addition, unlike some other markets such as securities financing transactions, haircuts on OTC derivative-related collateral are generally set once and remain unchanged through the cycle, eliminating the adverse effects of pro-cyclicality. Therefore, we respectfully submit that the industry has both the expertise and track record to support the idea that CSEs should be able to determine their own eligible collateral assets and haircuts, subject of course to the prudential oversight of supervisors.

Cross-margining - As discussed above under portfolio-based margining (Section [IV.3]), determining margin on a portfolio basis is an important way of reducing credit risk for a counterparty and generally reducing systemic risk. As discussed further in the prior section on netting, cross-margining should be recognized between (i) cleared and uncleared swaps within asset classes (including security-based swaps); (ii) swaps of different asset classes; (iii) uncleared swaps and other products (options, prime brokerage, futures, repo etc.); and (iv) cross-margining across legal entities. To the extent there is excess collateral for one type of transaction (e.g. repo), the rules should allow such excess to be permissible collateral for another transaction, including a swap, assuming the CSE's risk management systems would recognize the collateral as available credit support. The CSE's risk management system would be subject to review by the regulators.

[45] See ISDA Margin Survey 2010; available at http://www.isda.org/c_and_a/pdf/ISDA-Margin-Survey-2010.pdf.

2. If not determined by the CSEs, the scope of eligible collateral should be significantly expanded.

If not determinable by CSEs, the list of eligible collateral for both initial and variation margin should be expanded to include highly liquid, readily marketable assets. This is consistent with the standard for collateral recommended under the Basel capital accords. Also, as discussed above in connection with segregation of cash collateral, money market funds and bank deposits of the custodian should be eligible collateral so that cash collateral can be readily swept into (and withdrawn from) a revenue-generating asset. Again, haircuts should be determined by the CSEs, subject to review by the regulators.

There are several reasons for broadening the definition of eligible collateral. First, other assets (besides those listed in the proposal) are highly liquid and therefore are suitable for credit support if the counterparty fails. Second, if eligible collateral remains narrowly defined, liquidity of the eligible assets would potentially be affected and sourcing of adequate margin could become difficult, especially for smaller participants. We ask the regulators to perform an analysis of the impact on the eligible collateral markets of the margin rules and consider whether market distortions will occur.

We would further propose that CSEs be permitted to select credit mitigants other than collateral to reduce exposure to FEs in circumstances where there are issues as to the enforceability and liquidity of specific collateral, or where there are regulatory or other limitations that may restrict certain FEs, like foreign pension funds, sovereigns and quasi-sovereigns, from posting collateral in support of their swap obligations. One example of another type of credit mitigant is a contractual commitment included in the master agreement or related confirmation to "recoupon" one or more transactions in a portfolio if the net exposure exceeds the predetermined threshold amount. A recouponing provision would permit the CSE to terminate the swap, receive payment for termination, and transact a new trade with substantially similar terms but struck at market with a zero net present value (i.e. recoupon) for one or more transactions with the FE in order to reduce the CSE's exposure to the FE to zero or as close thereto as possible

VI. <u>Delivery Timing</u> - We request that the Commission not require that initial margin be posted on execution date; and that the rules provide that a CSE will be in compliance with its obligations to collect initial margin if it makes a good faith effort to collect.

A requirement that initial margin be posted on or before execution date would impose significant pressures on the CSEs and counterparties due to the operational difficulties involved in the determining and collecting of initial margin within a short time frame. It may not be computationally feasible to calculate margin requirements on or prior to execution because some inputs necessary for margin calculation are not available until after the trade is executed. The common industry practice is to have marks fed into systems overnight and collateral calls are made the next day; also allocations for funds may not be determined until close of business on the trade date. In addition, there are significant practical issues. For example, payment and settlement systems have intra-day cut-off times and some cross-border trades may be executed at a time when U.S. systems are closed. We recommend that initial margin be required to be posted by close of business on the trade date plus one business day, which is the convention for both the

current swaps and futures markets. Other regulations, such as Regulation T, provide that collection/payment may be made on a date after the trade date.

For variation margin, the proposed rules provide that a CSE will not be deemed to be in violation of its obligation to collect variation margin if the CSE has made good faith efforts to collect. We request that a similar provision be included for initial margin.[46]

VII. Inter-affiliate - We strongly encourage the Commission to exclude inter-affiliate trades from margin requirements.

Inter-affiliate trades are subject to the margin requirements under the current proposal. Such trades are used for internal hedging and risk management and do not increase systemic risk or threaten the safety and soundness of entities under common control. Margin is necessary as a risk matter to protect against the risk that such entity cannot meet its contractual obligations. There is no need to require margin for transactions between affiliates because any gains or losses do not create risk for the larger entity. Any gain on one entity is an equal and offsetting loss on the other. A zero sum game does not pose broad systemic risks. Inter-affiliate trades "simply represent an allocation of risk within a corporate group." [47] Therefore, inter-affiliate transactions do not present systemic risk. Accordingly, it is not appropriate to impose margin requirements on inter-affiliate transactions.

Under the current proposal, affiliates that are registered as CSEs will have to collect margin from each other and segregate initial margin with an independent custodian. Segregating initial margin between affiliates creates a large liquidity issue. By forcing affiliates to post and segregate initial margin, the proposed rule would drain liquidity from the system. Also, requiring affiliates to post and segregate initial margin will disincentivize CSEs from using a single entity (or limited number of entities) for centralized booking and risk management although such centralized booking would maximize capital and risk management efficiencies.

Further, at the onset of the margin requirements and for some time thereafter, there will be many firms that will be required to employ the "look-up" table as firms will either have no other models in place or will not yet have approval for their models. The conservative stance of the "look-up" table, coupled with the application of margin requirements to inter-affiliate transactions, will result in an extraordinary increase in margin required to be posted. This will inflict higher costs on both CSEs and end-users. Imposition of a segregation requirement will further impose additional costs and negative effects on market liquidity. Also, segregating initial margin with an independent third party creates risk to a new third party (i.e. the custodian) which previously did not exist for the internal trading activity.

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[46] CFTC Proposal §§ 23.152(b) and 23.153(b)(6): "A covered swap entity shall not be deemed to have violated its obligation to collect variation margin from a counterparty if: (i) The counterparty has refused or otherwise failed to provide the required variation margin to the covered swap entity; and (2) The covered swap entity has – (A) Made the necessary efforts to attempt to collect variation margin, including timely initiation and continued pursuit of formal dispute resolution mechanisms, or has otherwise demonstrated upon request to the satisfaction of the Commission that it has made appropriate efforts to collect the required variation margin; or (B) Commenced termination of the swap or security-based swap with the counterparty."

[47] See Commission and SEC joint proposed rule, "Further Definition of "Swap Dealer," "Security-Based Swap Dealer," "Major Swap Participant," "Major Security-Based Swap Participant" and "Eligible Contract Participant", 75 Fed. Reg. 244 at 80183.

We recognize that there are other statutes and regulations that may require the posting of collateral, such as Section 23A of the Federal Reserve Act. This letter focuses only on the rules as set forth in the CFTC Proposal and does not address such other regulations and statutes.

VIII. Implementation

1. Timing/Effective Date - The margin requirements should become effective on a phased-in basis that parallels the development of the market for cleared swaps and recognizes technological and regulatory difficulties.

Parallel development of cleared market - The margin requirements are closely intertwined with the clearing requirements and therefore should be applied in a manner consistent with the development of the clearing market over time. The cleared market will take time to develop across the different asset classes. Margin requirements should be imposed on uncleared swaps of a given asset class only when clearing becomes mandatory for swaps of that asset class. Treasury Secretary Geithner recently stated, "[i]mposing margin requirements on uncleared swaps will also help create incentives for market participants to use centralized clearing and standardized contracts so that they do not needlessly externalize risks to the financial system by avoiding central clearing." [48] Imposing margin requirements on transactions that are uncleared if there is no liquid cleared market for those transactions is unduly punitive.

In addition, the rules should provide that margin requirements become effective on a phased-in basis by counterparty type. Certain financial entities, such as swap dealers and some asset managers, will be able to adapt more quickly to margin requirements than other swap counterparties. As a result, we also recommend that the margin rules be phased in using the following stages: stage one – swap dealers and major swap participants, stage two – FEs, stage three – NFEs.

Technological, regulatory and documentation hurdles - Compliance with the margin requirements will entail significant time and monetary costs related to technological and other operational requirements. For example, risk management systems must be recalibrated and models and output will need to undergo various stages of testing before implementation. In addition, models will need to be approved by regulators, and this approval process is likely to be time-consuming, especially for the initial approvals which will be needed by all CSEs at the same time.

More specifically, in relation to the time needed to be able to calculate initial margin using an initial margin model, we would note that the complexity of an initial margin model depends very much on the products covered and the diversity of such products For single products in a single asset class, it may be possible to develop and robustly test such a model in six months. In contrast, the development and tests of models spanning different derivative instruments is a significantly more onerous task that will take longer.

[48] See remarks by Treasury Secretary Tim Geithner to the International Monetary Conference, on June 6, 2011 in Atlanta, GA, available at: http://www.treasury.gov/press-center/press-releases/Pages/tg1202.aspx.

CSEs and their counterparties will be required to make changes to their CSAs and custodial arrangements under the proposed rule. This will be very time-consuming, especially because all market participants will need to negotiate and document CSAs and consummate custodial arrangements during the same time period. It is our members' experience that even in the current environment it frequently takes three months or more to negotiate and establish a tri-party custodial arrangement for OTC derivatives trading. Following adoption of a margin rule, this time period may become longer as custodians will need to respond to a very significant volume of document requests. This problem will be exacerbated by the limited number of custodians. Compliance with the proposed rules will be particularly time-consuming for swaps between registrants and non-registrants.

Based on discussions with our members, a rough estimate of the time it would take to establish the necessary collateral arrangements is 1 year and eleven months, with an associated cost of $141.8 million, per CSE. This is an average of member estimates of (a) the number of collateral arrangements that will be required; (b) time needed to establish one arrangement, in man hours; (c) the number of lawyers that can be dedicated full-time to this effort; and (d) the cost of lawyer time per man hour. The time estimate is (a) the number of collateral arrangements, times (b) the number of man hours per arrangement, divided by (c) the number of dedicated lawyers. [49] The cost estimate is (a) the number of collateral arrangements, times (b) the number of man hours per arrangement, times (d) the cost of lawyer time per man hour. We request that the Commission undertake a study of how much time will be needed to enter into, negotiate and revise documentation to implement the margin rules and adjust the time for implementation accordingly.

From a broader perspective, compliance with the margin and capital requirements will compete for the limited resources available for the significant infrastructure work that will be necessary to implement the Dodd-Frank Act as a whole. Short timeframes will place significant stress on limited resources so as to increase the likelihood of deadlines not being met.

2. Pre-effective Date Swaps

(a) Swaps that are restructured after the effective date should not be subject to the margin requirements.

We support the Commission's proposal that margin requirements apply only to swaps executed after the effective date of the rule. However, the rule should state that a pre-effective date swap that is restructured after the effective date will not be subject to margin requirements if the basic economics of the swap do not change. For example, post-effective date swaps resulting from compression of pre-effective date swaps should not be subject to margin requirements. If a replacement of one or more old swaps with a new swap does not result in an economic change to the CSE, then there is no reason to impose margin requirements.

Also, the proposals should clarify that options on swaps ("swaptions") that are entered into prior to the effective date of the proposal should not be subject to the margin requirements to the extent such option is exercised after the effective date of the proposal. More specifically, if the

[49] The time estimate assumes 10 man hours per day and 250 working days per year.

swap resulting from the post-effective date exercise of the option is not cleared, such swap should not be subject to margin requirements given that the swaption was entered into prior to the effective date of the swap. In addition, swaps entered into prior to the effective date of the proposal but assigned after the effective date of the proposal should not attract margin requirements solely because it was assigned after the effective date. For pre-effective date swaps that provide for substitution mechanics (such as a portfolio credit default swap with substitution rights), the rules should clarify that a substitution under the terms of a pre-effective date swap will not result in the imposition of margin requirements on the transaction.

(b) For initial and variation margin, the rules should permit CSEs to net pre- and post-effective date swaps without application of the margin rules to pre-effective date swaps.

The proposal recognizes netting of pre-effective date swaps for variation margin only if such swaps comply with margin requirements. A better approach is to recognize netting of pre- and post-effective date swaps under the same master even if the pre-effective date swaps do not comply with the margin requirements. For initial margin, the CFTC Proposal permits netting if there is "sound theoretical basis and significant empirical support."[50] We understand, and ask the Commission to confirm that this means that this allows netting across pre-and post-effective date swaps even if the pre-effective date swaps do not comply with the margin rules. Variation margin should be treated in the same way. To the extent that the parties' swap trading relationship documentation would permit portfolio-based margining of swaps, CSEs should be permitted to include swaps executed prior to the effective date of these margin rules in their calculation of variation margin. However, there should be no requirement that unilaterally changes previously agreed economics of a transaction.

IX. Documentation

The terms of disclosure of initial margin model information should be determined by negotiation between the CSE and its counterparty.

We believe that customers of CSEs have a legitimate interest in understanding the basis on which initial margin is calculated so that they have a reasonable basis to verify the calculation independently. It is unclear whether the requirement in the proposed rule that the methodology of initial margin models must be "stated with sufficient specificity" would require disclosure of the models themselves or a lesser degree of information that would not entail the disclosure of information that is proprietary to CSEs. We believe that the appropriate approach is to allow the parties to agree on the nature of the information that will be provided to customers to facilitate independent verification. This would be one of several points of negotiation in addition to issues such as frequency of margin calls and the degree of proprietary information to be exchanged between the parties.

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[50] CFTC Proposal 23.155(b)(2)(v).

The Associations appreciate the opportunity to comment on the proposed margin and capital requirements. As the Commission progresses in its on-going effort to refine the proposed rules and harmonize the proposed approach with those of other regulators, we would welcome the opportunity to assist in that process. Please feel free to contact us or our staff at your convenience.

Sincerely,

Robert Pickel
Executive Vice Chairman
ISDA

Kenneth E. Bentsen, Jr.
Executive Vice President
Public Policy and Advocacy
SIFMA

ANNEX I

Macro-Economic Impact

Summary

ISDA estimates as much as $1.0 trillion of new collateral may need to be posted in the future if the proposed rules for margin for uncleared swaps recently published by the Commission and Prudential Regulators are adopted globally. This estimate does not include initial margin ("IM") for any derivatives other than interest rate products but does include variation margin for all products. In addition, the need for additional liquidity for future variation margin calls may be approximately $250 billion.

The estimate is hypothetical, based upon the assumption that the future derivatives market is much the same as today's market with respect to volumes and mix and types of products. While the estimate is conservative in several ways, it does not consider the effects of mitigation. Dealers will have considerable motivation to clear more existing swaps and to help clearinghouses develop the means to clear more products. For example, putting forward rate agreements ("FRAs") alone through a clearinghouse has the potential to reduce IM by more than $30 billion. Areas where the estimate might understate collateral requirements include the failure to include the IM required for asset classes other than interest rate products. While the notional amounts of these asset classes are significantly smaller than interest rate products, the IM as a percentage of notional amount is generally much larger. However, it would be difficult to estimate both the IM required as well as the independent amounts already posted through bilateral contracts. The analysis assumes all firms utilize an IM model for all financial entities. Clearly, some entities will be subject to the alternative method provided in the rules at least for a period of time. IM for these entities may be much larger. The analysis also may overestimate the proportion of products that must be cleared by financial entities and these products would, instead, be subject to margin rules. Finally, the netting provision in the rule could increase margin if counterparties elect to retain a single master agreement. Finally, as a general matter, it should also be noted that IM for client portfolios tends to diminish as a percentage of notional amount as portfolios grow and risks offset one another. This fact may create enormous economies of scale when similar transactions are cleared on a multi-lateral basis through a clearinghouse.

The analysis covers the global derivatives market as we assume regulators may converge on similar margin requirements. The analysis depicts a future marketplace scenario which is the same as the one that currently exists. The scenario essentially examines the effects of the rules as if they were made effective retroactively. Note if all counterparties continue to use a single master, the margin rules would apply to all swaps in the present marketplace and the margin requirement of $1.0 trillion would surface as single transactions take place counterparty by counterparty.

Assumptions

On the first day the rules become effective, there will be no impact on margin as the rules apply only to new transactions. We estimate it would take four or five years to create new interest rate derivatives amounting to today's $404 trillion. (This figure comes from the TriOptima trade repository report on interest rate products as of May 12, 2011.)

Here are the other assumptions in our scenario:

A) The rules are applied globally.
B) No new products become eligible for clearing.
C) Dealer swaps that MIGHT be eligible for clearing but are not cleared remain the same (about $41 trillion).
D) Financial entities subject to mandatory clearing clear eligible products in the same proportion as dealers. This might overestimate the amount of transactions subject to clearing as inter dealer transactions tend to be very standardized and subject to clearing. Some entities might also obtain exemptions from clearing but perhaps not from margin requirements.
E) Dealers post no initial margin today for transactions with other dealers.
F) Financial entities' current initial margins less those funds that may be moved to segregated accounts amount to 50% of the initial margins required by the rules.
G) For variation margin, we made simplistic but, we believe, reasonable assumptions regarding the increased need for variation margin and the liquidity required to meet future variation margin.
H) All firms employ an initial margin model rather than the alternative method permitted by the rules.
I) There is no cross margining benefit between cleared and uncleared transactions.
J) The TriOptima trade repository contains 80% of the global interest rate derivatives market.

Portfolio Tables

The tables that follow the text show the assumed portfolio of interest rate derivative transactions assumed in the scenario. Table 1 is taken from the TriOptima trade repository report noted above. Table 1 uses 50% of the swaps in the LCH clearing house to allow for double counting. The table estimates the amount of interest rate derivatives executed by those commercial entities not subject to margin by using the BIS figures for interest rate derivatives for non-financial counterparties as of year-end 2010. (The BIS survey and the TriOptima report draw on slightly different sources but we do not believe a high level of reconciliation would make a significant difference.) These volumes are then subtracted from the "Other" category reported by TriOptima and the result is named "financial entity" swaps, i.e. those now subject to the margin rules.

Table 2 computes the clearing percentages of products that might be clearing eligible for the dealers and then uses the same percentages for the financial entities. This assumption may very well overestimate the amount of clearing and, thus, underestimate the amount of transactions subject to the margin rules. The clearinghouses can only clear plain vanilla transactions and we cannot know how many of the derivatives listed as "Swaps" in the TriOptima report can, in fact,

be cleared. As can be seen, of $79 trillion of swap products that might be eligible for clearing, we have assumed $58 trillion would be cleared and, thus, not requiring margin under the rules.

Initial Margin (IM)

Initial margin calculations are presented in Tables 3 and 4. Table 3 examines IM requirements for financial entities. The table applies an IM percentage of 0.20% to a large portion of the financial entities transactions (all but FRAs and non-standard swaps). As noted, this assumes the market adopts an IM model over the course of the next few years. The 0.20% assumes that large clients of dealers have considerable amounts of offsetting risk in their interest rate swap portfolios. We applied 0.20% as well to basis swaps and simple option products such as caps, floors and swaptions, reckoning the basis swaps might be less volatile but would not tend to offset and the option products were partially hedged by a portion of the uncleared swaps. We suggest FRAs should require something no more than 0.10% as that might reflect a 40 basis point movement in a three month forward rate over a ten day period. We believe the non-standard swaps required considerably greater IM and selected 1.5% of notional, based, in part, by the presence of cross currency swaps making up 51% of the gross total of non-standard products. These computations produced aggregate IM of $308 billion. The $308 billion needs to be reduced by the amount of IM (called independent amount) currently posted under bilateral arrangements. It should be noted that many large counterparties do not post independent amounts. The average counterparty that does post independent amounts does so in smaller size than that required to be posted as IM by the new rules. Some of the current independent amounts will be converted to segregated IM, causing the dealers to replace funding. In all, we believe perhaps 50% of the $308 billion will need to be added to existing independent amounts or replaced as funding by dealers. Finally, we increased the resulting $154 billion by 25% to account for swaps not contained in the TriOptima repository and arrived at a need of $193 billion.

Initial margins for interdealer transactions are calculated in Table 4. We have made an estimate that the large volume of transactions between dealers will create a large amount of offsetting risk, although nowhere near the offsets that occur in a multilateral clearinghouse environment. We set the IM charges for FRAs at 0.0333% (one third that for financial entities) and the IM charge for plain vanilla swaps, basis swaps and simple option products at 0.10% (one half that for financial entities IM) and kept non-standard products at 1.5%. The rules require that dealers each post IM on a segregated basis. Therefore, the result from Table 4 ($171.2 billion) needs to be multiplied by 2 to arrive at the total of $342 billion. We then grossed this figure up by 25% to reflect the existence of many derivatives dealers other than those reporting to the TriOptima repository. The grand total is $428 billion.

Variation Margin ("VM")

Table 5 presents a short calculation of VM for financial entities. It uses the recent OCC quarterly derivative report for the fourth quarter of 2010 from which one can derive the uncollateralized exposure that banks have to other banks, securities firms, hedge funds and sovereigns. We used this group of four categories of users as a proxy for financial entities although we may have missed firms such as insurance companies and asset managers. The uncollateralized exposure of the US banking system to these entities amounted to $25 billion at

the end of 2010. (Remarkably, the uncollateralized exposure of the US banking system to all counterparties is only about $105 billion according to the OCC.) In Table 5, we also compare the net current credit exposure in the OCC report with the comparable figure from the BIS year end survey of derivatives activity (BIS Table 1). We see that the global total is 8.9 times the US total. We multiply the US total by 8.9 times and obtain an estimate for the global total of $223 billion. This assumes the benefits of collateral today are the same in the US as around the world. The OCC cites a collateral coverage ratios of 93% for banks and securities firms, over 100% for hedge funds and only 3% for sovereigns. In all the ratio of collateral covering current exposure is 89%. If we assume the global ratio is 85% for these categories, the global total for VM would be $320 billion. One additional word on VM. The OCC reports that the year-end net current credit exposure of $375 billion is well below its peak of $800 billion. We have chosen the $320 billion figure for this analysis.

As far as we know, there are no figures available that show the uncollateralized exposures that counterparties of dealers have to dealers. Furthermore, dealers do not pay variation margin on a large portion of their transactions with clients. The OCC report (OCC Table 6) shows the gross positive and negative fair market values for five large US banks and the ratio is very close to 1 for four of the five institutions. This would indicate the global total for exposures of financial entities to dealers may be close to the exposures of dealers to clients. If we start at $320 billion and assume 25% is covered by VM requirements, we arrive at $80 billion of VM requirements for dealers.

Additional Liquidity

Additional liquidity for variation margin calls will be needed by financial entities and, to a much smaller extent, by dealers. However, the additional liquidity is only needed for those transactions not currently collateralized which is relatively modest. Table 6 contains our calculations. We used a simple figure from the OCC report, potential future exposure, as the basis of our estimate. The OCC reported that potential future exposure for US banks totaled $764 billion at the end of 2010. We assumed market participants that had to post VM would ensure they had liquidity, either cash, highly liquid securities or credit facilities, equal to 50% of potential future exposure. We also assumed this new liquidity would be proportional to the net current credit exposure the financial entities have created that was not currently collateralized. (This was $25 billion or 6.7% of the $375 billion.) Applying these two percentages to the US financial entities, we found a need for additional liquidity of $26 billion (6.7% x 764 x 50%). Expanding the US total to a global estimate creates an enormous liquidity requirement of $228 billion. With respect to dealers, they will also need to have liquidity available for future variation margin. As noted, however, dealers typically have only a small portion of their transactions with clients subject to VM. Furthermore, their exposures to their clients often offset exposures from other clients. Taken together, these factors reduce the liquidity needed by dealers to perhaps $20 billion.

Summary

Financial entity IM	$193 billion
Dealer IM	$428 billion
Financial entity VM	$320 billion
Dealer VM	$80 billion
Total margin	$1,021 billion
Additional liquidity	$248 billion

The analysis should be viewed as an order of magnitude estimate. One cannot predict which entities will use derivatives in the future nor the amounts and types of products that will be used. It does not consider the effects of mitigation - in particular the effects of clearing more relatively simple products. Collateral requirements for non-standard swaps may make up as much as $374 billion of IM alone and may make the economics of clearing these products worth investigation. ISDA is pleased to respond to any questions regarding the analysis.

TABLE 1: INTEREST RATE DERIVATIVES MARKET

Source: TriOptima Trade Repository Report of May 13, 2011
And BIS OTC Derivatives Market Activity in the Second Half of 2010
(All $ in trillions)

Products **Counterparties**

				Other Consists Of:		
	CCPs (2)	Interdealer	Other	Non-Financial	Financial Entity	Total
Swaps	103.3	27.3	82.0	32.5	49.5	212.6
OIS	23.8	5.6	20.4	--	20.4	49.8
Basis	2.2	7.8	9.1	--	9.1	19.1
FRAs	--	28.3	28.1	0.9	27.2	56.4
Option Products (1)	--	19.1	27.7	3.9	23.8	46.8
Non-Standard	--	6.8	12.7	--	12.7	19.5
Total	129.3	94.9	180.0	37.3	142.7	404.2

(1) Consists of CAPS, Floors and Swaptions
(2) 50% of amounts reported by TriOptima to eliminate double count
(3) Figures reported by BIS. All Swaps reported by BIS allocated to TriOptima "Swap" Classification

TABLE 2: COMPUTING FINANCIAL ENTITIES CLEARED AND BILATERAL TRANSACTIONS

($ in trillions, except %)

	Dealer Products				Financial Entities			
	CCP	Interdealer	Total	% Cleared	Amount	% Cleared	Amount Cleared	Amount Bilateral
Swaps	103.3	27.3	130.6	79%	49.5	79%	39.1	10.4
OIS	23.8	5.6	29.4	81%	20.4	81%	16.5	3.9
BIS	2.2	7.8	10.0	22%	9.1	22%	2.0	7.1
Total	129.3	40.7	170.0		79.0		57.6	21.4

TABLE 2A: RESULTING BILATERAL FINANCIAL ENTITY PORTFOLIO

($ in trillions)

Swaps	10.4
OIS	3.9
Basis	7.1
FRAs	27.2
Options	23.8
Non-Standard	12.7
Total	85.1

TABLE 3: INITIAL MARGIN
FOR FINANCIAL ENTITIES

	Trillions Amount	IM %	Billions IM
FRAs	$27.2	0.10%	$27.2
Non-Standard	$12.7	1.50%	$190.5
All Others	$45.2	0.20%	$90.4
Total	$85.1	0.36%	$308.1

TABLE 4: INITIAL MARGINS
FOR DEALERS

	Trillions Amount	IM%	Billions IM
FRAs	28.3	0.0333%	9.4
Non-Standard	6.8	1.50%	102.0
All Others	59.8	0.10%	59.8
Total	94.9	0.18%	171.2

TABLE 5: VARIATION MARGIN
FOR FINANCIAL ENTITIES

(All $ in billions)

BIS Gross Credit Exposure (1)	3,342
OCC Net Current Credit Exposure (2)	365
BIS/OCC	8.9
OCC Uncollateralized Exposures (3)	
- Banks & Securities Firms	15.5
- Hedge Funds	---
- Sovereigns	11.0
Total	25.5
Global Estimate	227.0

(1) BIS Table 1
(2) OCC P7
(3) OCC P8

TABLE 6: ADDITIONAL LIQUIDITY
FOR FINANCIAL ENTITIES

(All $ in billions)

OCC Potential Future Exposure (1)	764.0
Assumed Liquidity Needed	50%
OCC Financial Entities Net Current Credit Exposures Not Curently Collateralized	25.0
% of Total Net Current Credit Exposure	6.7%
Additional Liquidity Needed 764 x 50% x 6.7%	25.6
Global Estimate (x 8.9)	228

(1) OCC P7
(2) OCC P8

ANNEX II

Initial Margin Models: VaR and Margined Exposure Profile Models

Introduction

When a party to a portfolio of derivatives transactions fails to perform, their counterparty suffers a cost of replacing the affected portfolio or otherwise hedging their risk. *Initial margin* (or "IM") is an amount of money taken as a buffer against that cost. It is estimated as the potential increase in the market value of the derivative portfolio – that is, how much more the non-performing party might owe – over some close-out period known as the *margin period of risk*. The margin period of risk is a prudent estimate of the time between the last variation margin payment and the estimated date at which the market risk of the surviving derivative portfolio could be hedged or *rebalanced*.

Rebalancing refers to the action traders take to eliminate the change in the market risk of the surviving derivative portfolio caused by the non-performance of a party to a derivatives transaction or transactions, and the accompanying termination of its transaction(s). Market participants typically follow one of three strategies to rebalance the market risk of the surviving portfolio:

1. The simplest strategy, with the highest transaction costs, is to simply replace, at current market rates, each contract that had been transacted with the defaulted counterparty one by one.

2. A typically less costly strategy decomposes the portfolio of derivatives with the defaulted counterparty into a smaller *netted portfolio* that has the essentially the same market factor sensitivities. The netted portfolio would tend to contain fewer transactions than the original portfolio because it would take into account the effects of completely or partially offsetting transactions with the counterparty. In this case, rebalancing the portfolio consists of replacing the smaller netted portfolio instead of replacing each defaulted transaction.

   It should be noted that when traders hedge their portfolios, they do not necessary do an offsetting transaction for each derivative with a customer. Instead they hedge the sensitivity of the market risk of their portfolio to changes in the set of market factors which influence the value of the portfolio. Thus, replacing the netted portfolio of the defaulting party is consistent with how market risk hedging is normally done.

Finally note that another step in the default management process is *the liquidation of collateral*. Whatever collateral has been posted must be taken into ownership and then sold. The risk that the value of collateral could fall during the period required to liquidate it is covered by applying an appropriate haircut to the market value of each asset pledged as collateral, to transform its current market value into a cash equivalent. Initial margin is only needed to cover the potential incremental cost of replacing or rebalancing the portfolio of defaulted transactions, it is not needed to cover the potential risk of liquidating collateral.

Modeling IM

There are two common methods of calculating the IM of a counterparty: a) VaR simulation or b) the type of portfolio simulation used to calculate a counterparty's exposure profile.

- **IM and VaR**

  VaR is a process to measure the potential change (gain or loss) in the market value of a portfolio of contracts, at a specified confidence level, for a specified type of instantaneous shock in market rates.

  The three basic steps in a VaR process are:

  1) The simulation of many possible scenarios of changes in market factors. For each scenario, the change in each market factor is simulated over a specified time horizon (e.g. a one-day change, or a ten day change). There are many methods for generating scenarios of changes in market factors, of which two of the most commonly used are:
     a) In *Monte Carlo simulation*, changes in market factors are simulated using statistical parameters, such as volatilities and correlations. These statistical parameters are derived from either from historical data or from market predictions of future behavior ('implied' data).
     b) In *historical simulation*, future changes in market factors over the specified time horizon are based on actual historical changes in those market factors over the specified time horizon.

     There are relative advantages and disadvantages in using either Monte Carlo or historical simulation. Both methods are (subject to other standards being met) acceptable for calculating regulatory capital for market risk.

  2) The measurement of the change in the value of the portfolio of contracts for each simulated scenario. There are two broad method for doing this:
     a) In *full revaluation*, each transaction is marked to market for each scenario. The change in the market value of the portfolio is calculated for each scenario by the simple subtraction of the base line market value of the portfolio.
     b) In *parametric revaluation*, the change in the value of the portfolio to changes in market factors is represented by grids of *sensitivities* to each market factor, and these grids are used to estimate the P/L impact of a given scenario.

  3) The last step in the calculation of VaR is the ordering of the simulated potential change in portfolio value from most positive to most negative.
     a) When VaR is used to measure market risk, one measures the *potential loss* in the market value of the portfolio at a high confidence level, e.g. 95% or 99%. The 99% loss is the value for which a loss greater than that amount should occur only 1% of the time.
     b) When VaR is used to calculate IM one measures the potential gain in the market value of the portfolio at a high confidence level, e.g. 95% or 99%. This is because if the portfolio gains in value from one party's perspective, such party has more to lose from its counterparty's non-performance.

One alternative approach for estimating IM is to set it equal to the *expected shortfall* at a specified confidence level. The expected shortfall is the expected gain in the value of the portfolio, conditional on the simulated gain exceeding the VaR at the specified confidence level. Thus for instance the 99% expected shortfall is how much on average we would expect the portfolio to be worth given that we know it is in the top 1% of gains. By its nature, this methodology will always result in an IM higher than that determined by VaR at the same confidence level.

Although the basic methodology for simulating VaR to measure market risk or to measure IM are the same, there are two key differences in the respective processes:

Purpose of measurement	Sign of change in value	Organization of data
IM	Potential Gain	By counterparty, including information on legally enforceable netting and margin agreements and any applicable thresholds
Market Risk	Potential Loss	By trading organization – from portfolio, to desk, to entire trading business.

Thus while the simulation engine and processes are essential the same, IM measures the potential gain in value whereas market risk measures the potential loss of value. As described above, that difference is not fundamental since a VaR process measures a distribution of change in value and can measure either the potential gain or loss at a specified confidence level.

A more important issue concerns the organization of the data that is selected to be input into the VaR process. To use VaR to calculate IM requires a separate process of labeling and aggregating market sensitivities by counterparty. It also requires information on legally enforceable netting and margin agreements.

- **IM and the Counterparty's Exposure Profile**

A second method for modeling IM is to use Monte Carlo simulation to simulate the *potential exposure profile* of the counterparty, at a high confidence level (e.g. 95%, 99%), over the lifetime of the transactions with the counterparty. Thus rather than looking at one point in the future, the exposure profile method examines the entire future behavior of the portfolio. The counterparty's exposure profile is the potential replacement cost of the derivative transactions with the counterparty, at a specified confidence level, over a specified set of future dates, until the maturity of all transactions with the counterparty.

The exposure profile approach produces the *Expected Positive Exposure* (EPE) profile of the counterparty. This is used both in the Basel approach to regulatory capital for counterparty credit risk and in many bank's economic capital models.

The accurate simulation of a counterparty's exposure profile requires two basic steps:

1) The simulation of the potential market value of each transaction with the counterparty

over time. This requires both a simulation of changes in market rates over time and the simulation of contractual changes in each transaction with the counterparty over time, to take into account the settlement of cash flows, the setting of floating rates, the expiration of transactions and so on. The simulation assumes no additional transactions are done with the counterparty.

2) The simulation at each point in time of the replacement cost of the relevant portfolio. This requires aggregation rules which need to take into account if a transaction is part of a legally enforceable netting set and/or a legally enforceable margin agreement.
   - For margin agreements, this approach requires the simulation of the dynamic changes in variation margin over multiple margin periods of risk. That is, our method must account for the margin that would be called for at a given point.

The *margined exposure profile* is the exposure profile calculated at a specified confidence level, e.g. 99%, over the life of the portfolio with the counterparty, which takes into account the dynamic adjustment of variation margin over time. The maximum value of the margined exposure profile is an alternative measure of IM. We can think of it as the amount our simulation predicts we could lose at the chosen confidence interval if the counterparty defaults at the worst possible time.

Note that calculating a margined exposure profile is more difficult than calculating VaR. It has the advantage of capturing changes in the counterparty's margined exposure profile caused by the settlement of cash flows and changes in the level of market rates, over multiple margin periods of risk, over the entire life of the portfolio. For example, this method would capture the jump in the potential change in value of the portfolio over the margin period of risk that would occur at the maturity of a transaction that was offsetting the market risk of the surviving portfolios of transactions with the counterparty. At the maturity of that offsetting derivative, there would be a jump in potential increase in the market value of the remaining portfolio over the margin period of risk. If VaR was used to calculate IM, this jump would require additional IM.

IM and Economic Capital

It is important to note the inter-dependent nature of the confidence level and methodology used to model IM and the amount of Economic Capital of a derivative portfolio.

Capital Requirements are based on an estimate of the amount required by the institution to absorb a very severe loss. Thus for instance a financial institution may be required to hold capital sufficient to absorb possible losses that would occur 99 years in 100. (A one year, 99% capital requirement.) Capital requirements typically cover multiple risk classes including market, credit and operational risks.

Initial margin is an amount taken from the counterparty to cover the risk of their non-performance up to a certain threshold. Thus, all other things being equal, taking more IM means that less capital is required for counterparty credit risk, as more of the risk has been absorbed by IM, meaning that less capital is needed to achieve the desired safety standard.

There will typically be *some* capital requirement however as it is uneconomic to charge IM to a similar safety standard than that used for capital. For instance, many firms use a 99.9% one year standard for their own internal economic capital calculations, whereas margin may be calculated at the 99% level.