

COMMITTEE ON CAPITAL MARKETS REGULATION

March 4, 2010

The Honorable Christopher Dodd
Chairman
Committee on Banking, Housing and Urban Affairs
534 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Barney Frank
Chairman
House Financial Services Committee
2129 Rayburn House Office Building
Washington, DC 20515

The Honorable Richard Shelby
Ranking Member
Committee on Banking, Housing and Urban Affairs
304 Russell Senate Office Building
Washington, DC 20510

The Honorable Spencer Bachus
Ranking Member
House Financial Services Committee
2246 Rayburn House Office Building
Washington, DC 20515

Re: Centralized Clearing and Exchange Trading of Derivatives Contracts

Dear Chairman Dodd, Ranking Member Shelby, Chairman Frank and Ranking Member Bachus:

Since 2005 the Committee on Capital Markets Regulation (Committee) has been dedicated to improving the regulation of U.S. capital markets. Our research has provided an independent and empirical foundation for public policy. In May 2009, the Committee released a comprehensive report entitled, *The Global Financial Crisis: A Plan for Regulatory Reform* (Report), which contains 57 recommendations for making the U.S. financial regulatory structure more integrated, more effective and more protective of investors.¹ Our Report included a discussion of the potential reduction in systemic risk in the financial system from the central clearing and exchange trading of over-the-counter (OTC) derivatives contracts. We believe it is useful for us to comment on legislation currently being considered by Congress that deals with these and related issues. While all 32 of our recommendations are included in the body of this letter, we summarize them below.

At the outset, the Committee notes that while there is broad consensus on the principles articulated in this letter, there are some differences between Committee members. The views stated in this letter should not be attributed to any particular member individually.

¹ COMM. ON CAPITAL MKTS. REG., *THE GLOBAL FINANCIAL CRISIS: A PLAN FOR REGULATORY REFORM* (May 2009), available at <http://www.capmksreg.org/research.html>.

Summary of Recommendations

1. Systemic Risk

- a. Centralized clearing reduces systemic risk, fundamentally, by making the clearinghouse (CCP), rather than one dealer, the counterparty to each transaction. All clearinghouse members stand behind each cleared trade. This is the core justification for requiring OTC trades to be conducted through a clearinghouse. But since the CCP is counterparty to each cleared transaction, the failure of the CCP would itself pose a systemic risk; such risk will increase with the volume of trades the CCP clears. In general, therefore, clearing reduces systemic risk only if (a) the reduction in systemic risk that results from mutualizing the losses that would result from the insolvency of individual derivatives dealers or other market participants is greater than (b) the increase in systemic risk posed by the prospect of insolvent CCPs.
- b. There are other significant benefits from the use of a CCP, which some may regard as merely increasing efficiency, but which others regard as playing a significant supporting role in reducing systemic risk. CCPs significantly reduce total potential insolvency losses by increasing netting; requiring the segregation of accounts; having standardized two-way margin programs; establishing capital requirements for the clearinghouse and its members; managing transfers of collateral; and generally increasing transparency, which is an important public good. All of these improvements reduce externalities and, taken as a whole, may be quite important to reducing systemic risk.

2. Types of Contracts

- a. Contracts should be subject to central clearing requirements only if they are standardized and liquid.
- b. Contracts that are customized are poor candidates for central clearing due to the difficulty in pricing and setting margin requirements for such contracts. Customized contracts can be an important way for users to reduce risk, however, and should not be prohibited by legislation. On the other hand, the Committee supports industry efforts to achieve greater standardization.
- c. Although some Committee members disagree, the majority of the Committee would oppose an unbounded, blanket exemption of all foreign exchange contracts from clearing requirements. While foreign exchange contracts are settled through the CLS Bank, this reduces currency settlement risk by ensuring simultaneous transfer of the two legs of a foreign exchange contract; it does not reduce market risk or the credit risk resulting from the failure of one of the contract parties. However, the Committee would support an exemption for foreign exchange contracts with maturities of up to one month, where risks are limited, and would give the Federal Reserve the authority to extend the exemption for foreign exchange contracts with somewhat longer maturities. (Throughout, consistent with our other reports, we would give the Federal Reserve exclusive authority to regulate clearing and settlement due to its centrality to systemic risk)
- d. Subject to general principles established in legislation regarding standardization and liquidity, the Committee believes the Federal Reserve rather than market participants or

CCPs should ultimately determine what types of contracts are centrally cleared. It would be inappropriate to leave the decision to CCPs, because CCPs are largely controlled by dealers and dealers may have too little incentive to opt for central clearing if it results in a narrowing of their spreads. On the other hand, the Federal Reserve should undertake a cost-benefit analysis before deciding to require clearing of a new category of contracts beyond what CCPs are themselves offering to clear. Any such action should be subject to the same standards of review and challenge as any other similar regulatory action under existing law.

3. Types of Counterparties

- a. All standardized and liquid derivatives contracts that only involve clearinghouse members should be centrally cleared. But since the losses from the default of a non-member of a clearinghouse are borne entirely by a member guarantor, clearing of contracts involving non-members does not facilitate loss mutualization. As such, the Committee's basic recommendation is that the proposed legislation should generally not require clearing of contracts involving non-members. Our preference is that as many contracts as possible be cleared by members on both sides—use of guarantees is a second best solution.
- b. To ensure that limiting the central clearing requirement to contracts between clearinghouse members does not exclude systemically important institutions from coverage, the Committee further recommends that the proposed legislation require all institutions that exceed defined net exposure thresholds be made clearinghouse members if they qualify under reasonable and non-discriminatory standards.
- c. The net exposure test would require each firm to calculate its net exposure to each of its counterparties, excluding exposure from swaps used to hedge commercial risk. The firm would then add up its net exposure to each of its counterparties to calculate its aggregate net exposure. Any firm whose aggregate net exposure is above the relevant threshold could be required to obtain membership in a relevant clearinghouse, subject to reasonable standards of solvency to ensure that the clearinghouse and its membership were adequately capitalized. Regulators should be given authority, to the extent they do not already have it, to adjust exposure thresholds to prevent firms from managing their exposure just below the cut-off, and to monitor membership criteria to ensure that existing clearing members do not establish discriminatory membership standards.
- d. While the Committee is aware that certain potential clearing members do not have the ability to price and participate in default management, these services could be purchased from those that do. Thus, lacking these capabilities does not constitute an insurmountable obstacle to clearinghouse membership. On the other hand, the Committee acknowledges that purchasing the necessary services could be extremely expensive, in which case the Committee would recommend giving non-clearinghouse members greater clearinghouse access. More generally, the Committee recommends that those on the buy-side who wish to use central clearing (on a guaranteed basis) be granted this access on reasonable and non-discriminatory terms.
- e. While the Committee anticipates that the net exposure threshold test will require all dealers to become clearinghouse members, it is unlikely to cover commercial companies.

As stated above, “net exposure” would exclude exposures that arise from swaps used by companies to hedge commercial risk. The Committee supports this approach since there is limited (if any) market risk associated with swaps that are used purely to hedge. Moreover, the data suggest that contracts with commercial companies account for a small proportion of the derivatives market. As such, the aggregate systemic risk from contracts from commercial use is limited.

- f. Because of the exclusion of swaps used to hedge commercial risk from the calculation of a firm’s net exposure, any impracticality in accepting commercial companies as clearinghouse members may not constitute a major practical difficulty. Nevertheless, in principle, clearinghouse membership and clearing requirements should be applicable to commercial firms. An objective test focused on net exposure thresholds is fairer and more manageable for regulators to establish than a test that focuses on whether a firm is “commercial,” “financial,” or otherwise. Arbitrary distinctions between different types of firms would create incentives for regulatory arbitrage; firms could create “non-financial entities” to run systemically risky books.
- g. Some Committee members argue that it would be better to encourage firms to clear using member guarantees rather than requiring them to become clearinghouse members themselves. In the event that a firm fails, these Committee members argue, the use of a member guarantee will place an additional capital buffer between the firm and the clearinghouse. However, the majority of the Committee gives more weight to the fact that the use of a guarantee requires one party—the member guarantor—to bear the cost of the failure instead of spreading it out over the entire CCP membership. Other Committee members believe the clearinghouse membership and related clearing requirements should not be triggered by a net exposure threshold but rather by a more holistic assessment of whether a company’s derivatives portfolio poses systemic risk. These Committee members would favor the development of even stronger corporate exemptions.
- h. While many firms whose exposures exceed the defined net exposure thresholds could be admitted as clearinghouse members, some—including dealers that have lower capital, some hedge firms, as well as most (if not all) mutual and pensions funds—may not meet reasonable membership qualifications. (The Committee further notes that the net exposure threshold test would not require fund managers, as opposed to the funds themselves, to become CCP members.) When firms whose activities give rise to substantial net credit exposure do not qualify for clearinghouse membership, they should be required to clear their trades even if it means obtaining a member guarantee. While the guarantee may increase the risk of the guarantor member, clearinghouse members will generally be subject to higher levels of supervision than the firms whose positions they are guaranteeing and are, therefore, less likely to fail and set off a chain reaction of failures. The likelihood of a chain reaction of failures could be even further reduced if clearinghouses and their regulators actively monitor the collateralization of member guarantees.
- i. Some Committee members favor imposing an even broader clearing requirement on non-clearinghouse members because they believe clearinghouses will generally offer better opportunities for netting contracts and segregating collateral, and will develop and consistently apply superior margining methodologies. Although the Committee believes there are not yet enough data to support a clearing requirement for all non-clearinghouse

members on these grounds, we do believe the legislation should direct the Federal Reserve to further study these issues. If the Federal Reserve finds that under-collateralization is a widespread problem or that the bilateral market does not offer sufficient netting and segregation opportunities, commercial companies, even without substantial net exposures, might have to become subject to the clearing requirement even if it means they will need to obtain member guarantees for their trades.

- j. The Committee strongly supports segregation of initial margin, and while legislation should not require initial margin for uncleared derivative contracts to be held in segregated accounts, since counterparties who prefer this arrangement can bargain for it, dealers should be required to fully disclose collateral arrangements and offer counterparties the opportunity to segregate initial margin on a non-discriminatory basis with the agent of their choosing.

4. The Scope, Number and Ownership of Clearinghouses

- a. The Committee's current view is that there are benefits from having multiple, well-capitalized clearinghouses, with strong margining procedures. Since counterparties may be from different jurisdictions, clearinghouses should, to the extent possible, be international in scope, at least insofar as they clear the same contract. Regulators should also establish standards for recognizing clearinghouses operating in other jurisdictions to limit the possibility of cross-border arbitrage in global markets.
- b. The Committee believes that clearinghouses should be organized according to asset class. Different asset classes have different risk profiles and are better handled by different risk management techniques. Assuming that it is more difficult for one CCP to manage risk across multiple asset classes than it is for multiple CCPs to handle risk from one asset class each, having multiple CCPs organized by asset class could be the safer option. On the other hand, the Committee acknowledges that some of its members do not believe there are risk management benefits to be gained by limiting clearinghouses to one asset class, and they are concerned that organizing CCPs by asset class will substantially increase the cost of clearing since there will be less risk diversification and netting, and because it will be more difficult to spread the cost of capitalizing CCPs.
- c. While a more limited number of clearinghouses would lead to greater netting and more efficient margining, less efficient margining will not lead to increased systemic risk as long as margin levels are sufficient. The Committee believes regulators must carefully monitor clearinghouses to make sure they require adequate margin.
- d. There should not be limitations on who can own clearinghouses, because such restrictions will discourage the formation of and membership in clearinghouses and because such restrictions are likely to be ineffective. Congress should adopt a more direct solution to potential conflicts by subjecting clearinghouses to strict regulatory oversight.

5. Transaction Reporting

- a. The Committee's May Report recommended the adoption of reporting requirements for derivatives transactions and the development of a system for dissemination of transaction data similar to the TRACE system for corporate bond transactions. The Committee

supports measures in the proposed legislation that further that goal, including requirements for the reporting of derivatives transactions to data repositories, and for clearinghouses and data repositories to disseminate aggregate data on trading volume, transaction prices, quotations and open interest to the public no less frequently than daily. The Committee also supports studies such as those specified in the House bill that would form the basis for the development of algorithms to characterize derivatives contracts in a standardized, industry-wide form.

- b. Nevertheless, the Committee is aware that an immediate reporting requirement for all trades—as opposed to trades that occur on an exchange, which are automatically captured and reported—could be costly. We would, therefore, support a modest delay in reporting most trades, allowing a reduction of cost through a bunching procedure.
- c. The Committee also is aware of the potential damage from applying continuous reporting requirements to large derivatives trades. The issues are analogous to those involved in reporting “block trades” in the equity context. If traders know someone is shopping or seeking to acquire a large position, traders will take advantage of this knowledge. This, in turn, will make block sales or purchases less likely and reduce liquidity. We thus recommend that the Federal Reserve permit delayed reporting for transactions that are large compared to average volume or that involve contracts that infrequently trade.

6. Derivatives Exchanges

- a. While exchange trading of derivatives would further reduce systemic risk over and above what can be achieved through central clearing, the Committee now believes exchange trading should not be required but encouraged where appropriate.
- b. To the extent that legislation does, however, mandate exchange trading, regulators should have authority to determine which contracts would be subject to exchange trading requirements.
- c. To the extent that legislation involves an exchange trading requirement, the only alternative to trading on an organized exchange should be trading on a platform along the lines of an “alternative trading system,” or another venue that is appropriately regulated in light of the transparency objectives of the legislation.
- d. Some Committee members argue that an alternative trading system for OTC derivatives may need greater regulation than one for cash securities. According to these Committee members, additional regulation may be needed, first, because of the nature of the products involved. Second, if alternative trading systems for derivatives are as lightly regulated compared to derivatives exchanges as alternative trading systems for cash securities are relative to exchanges for cash securities, it could drive activity away from derivatives exchanges.
- e. A majority of Committee members are concerned that the spread advantages dealers recognize by not trading on exchanges may overcome market forces that might otherwise

lead to exchange trading. Opposition to exchange trading based purely on dealers' interest in maintaining spreads lacks a sound public policy basis and should not be permitted to prevail.

7. Supervision of Financial Institutions

- a. H.R. 4173 and the Senate bill address capital requirements and margin requirements for both banks and non-banks that have positions in derivatives. The Committee suggests that it may be appropriate to exclude firms from such capital and margin requirements if their net derivatives exposures do not exceed designated thresholds.
- b. Regulators of financial institutions should carefully scrutinize the adequacy of capital requirements for non-centrally cleared derivatives contracts and mandate minimum capital levels to ensure sufficient reserves against the risk these contracts create.
- c. Congress should avoid placing unnecessary restraints on regulators in determining appropriate capital requirements for different types of financial institutions, since capital requirements that are not appropriate to the risk of the institution and the position can give rise to regulatory arbitrage.
- d. Capital requirements used by U.S. regulatory authorities should be harmonized with capital requirements arising from international agreements.

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A. Systemic Risk

Derivatives contracts transfer risk from one party to another. While there are substantial benefits that arise from the transfer of risk to the party best able to bear it, derivatives contracts also give rise to the risk that counterparties to the contracts will fail to perform. Counterparty risk becomes systemic risk when the failure of one institution starts a chain of failures.

We have an inadequate understanding, however, of whether the interconnectedness of financial institutions through OTC derivatives is a serious source of systemic risk. Many argue that the fact that collateral that Lehman's counterparties had posted to it for their non-cleared derivatives trades was not segregated led to both a run on Lehman before it collapsed and, once it collapsed, significant losses and widespread inability of Lehman's counterparties to perform on offsetting contracts. These may have been key contributors to the credit market crisis of

September 2008.² On the other hand, some believe Lehman's collapse may have had more to do with its prime brokerage business than its derivatives book, and question the supposition that Lehman's collapse left its derivatives counterparties unable to fulfill other obligations. Perhaps many firms already have adequate protection against the possibility of counterparty defaults, even given the fact that collateral coverage in the derivatives industry overall is only partial.³ We really do not know. A first priority should be to collect such data. Until we do, however, it is prudent to assume that the worst could occur.

The use of OTC derivatives remains widespread despite the recent turbulence in financial markets. The International Swaps and Derivatives Association (ISDA) estimates that as of the end of June 2009, the aggregate notional amount of outstanding interest rate derivatives, including interest rate swaps and options and cross-currency swaps, was \$414.1 trillion (compared to \$464.7 trillion one year earlier), and the aggregate notional amount of outstanding credit default swap contracts was approximately \$31.2 trillion (compared to \$54.6 trillion one year earlier).⁴

Assuming there are significant systemic risks that arise from the interconnectedness of counterparties, these risks can be substantially reduced through the use of centralized clearing arrangements. Centralized clearing reduces systemic risk, fundamentally, by making the clearinghouse (CCP), rather than one dealer, the counterparty to each transaction. All clearinghouse members stand behind each cleared trade. This is the core justification for requiring OTC trades to be conducted through a clearinghouse. But since the CCP is counterparty to each cleared transaction, the failure of the CCP would itself pose a systemic risk; such risk will increase with the volume of trades the CCP clears.⁵ In general, therefore, clearing reduces systemic risk only if (a) the reduction in systemic risk that results from mutualizing the losses that would result from the insolvency of individual derivatives dealers or other market participants is greater than (b) the increase in systemic risk posed by the prospect of insolvent CCPs.

² Darrell Duffie, *The Failure Mechanics of Dealer Banks* 23 (Stanford Graduate Sch. of Bus., Working Paper, June 22, 2009), <http://www.stanford.edu/~duffie/dealers.pdf> ("The weakness of a dealer can also be exacerbated if its derivatives counterparties attempt to reduce their exposures to that dealer by entering new trades that cause that dealer to pay out cash."); *id.* at 25-26 ("...a rush by OTC derivatives counterparties to exit their positions with a weak or failed dealer could be disruptive to derivatives markets and to other financial markets and institutions.").

³ According to the 2009 ISDA Margin Survey, 66% of OTC derivative credit exposure is now covered by collateral, as compared with 29% in 2003. ISDA also reports that 65% of all OTC derivatives trades are subject to collateral agreements, compared with 30% in 2003. Int'l Swaps and Derivatives Ass'n, *ISDA Margin Survey 2009*, at 7 (2009), available at <http://www.isda.org/media/index.html>. Some Committee members argue that, if exposures between corporate affiliates were excluded from these calculations, these percentages may be higher. But ISDA has indicated that its statistics may also overstate the degree of collateralization. *Id.* at 12.

⁴ Press Release, Int'l Swaps and Derivatives Ass'n, ISDA Mid-Year 2009 Market Survey Shows Credit Derivatives at \$31.2 Trillion (Sept. 15, 2009), available at <http://www.isda.org/media/index.html>; Press Release, Int'l Swaps and Derivatives Ass'n, ISDA Mid-Year 2008 Market Survey Shows Credit Derivatives at \$54.6 Trillion (Sept. 24, 2008), available at <http://www.isda.org/press/press092508.html>.

⁵ Darrell Duffie, Ada Li & Theo Lubke, *Policy Perspectives on OTC Derivatives Market Infrastructure* 8 (Fed. Res. Bank of N.Y. Staff Reports, Staff Report No. 424, Jan. 2010) ("If a CCP is successful in clearing a large quantity of derivatives trades, the CCP is itself a systemically important financial institution.").

There are other significant benefits from the use of a CCP, which some may regard as merely increasing efficiency, but which others regard as playing a significant supporting role in reducing systemic risk. CCPs significantly reduce total potential insolvency losses by increasing netting; requiring the segregation of accounts; having standardized two-way margin programs; establishing capital requirements for the clearinghouse and its members; managing transfers of collateral; and generally increasing transparency, which is an important public good. All of these improvements reduce externalities and, taken as a whole, may be quite important to reducing systemic risk.

B. Types of Contracts

One could argue that the mandatory centralized clearing of all types of derivatives contracts entered into by all types of parties would result in the largest potential reduction in systemic risk.⁶ However, the Committee believes there are important differences between contracts and market participants that should be taken into account in determining the application of clearing requirements.

1. Types of Contracts

a. Standardized and Liquid

Contracts should be subject to central clearing requirements only if they are standardized and liquid. Contracts that are customized are poor candidates for central clearing due to the difficulty in pricing and setting margin requirements for such contracts. Customized contracts can be an important way for users to reduce risk, however, and should not be prohibited by legislation.⁷ On the other hand, the Committee supports industry efforts to achieve greater standardization.

Contracts developed from standard contract terms promulgated by ISDA are relatively new in the OTC derivative markets. Regarding CDS, the first truly standardized contracts began trading as CDS indices in 2003. Since that time, CDS indices have seen an explosion in growth in terms of trading and notional volumes. Consolidation of competing indices led to the

⁶ While the cleared portion of the OTC derivatives market remains relatively small, there are signs that it is growing. Near the end of 2009, the fifteen largest OTC derivatives dealers (OTC-15) indicated that approximately 35% of the gross notional amount of the OTC interest-rate derivatives market was cleared. While clearing for credit default swaps appears less common, there are now three CCPs clearing CDSs, with several additional CCPs slated to begin clearing CDSs. In addition, as discussed below under the heading “Dealer Commitments to Increase Central Clearing,” the OTC-15 have made commitments to the Federal Reserve Bank of New York to substantially increase the percentage of cleared interest-rate and CDS trades. Duffie, *supra* note 5, at 11-12; Letter from the Senior Mgmt. of the OTC-15 to William C. Dudley, President, Fed. Res. Bank of N.Y. (Sept. 8, 2009), <http://newyorkfed.org/newsevents/news/markets/2009/ma090908c.pdf>; Fin. Serv. Authority & HM Treasury, *Reforming OTC Derivative Markets* 12 (Dec. 2009), http://www.fsa.gov.uk/pubs/other/reform_otc_derivatives.pdf.

⁷ *Reform of the Over-the-Counter Derivative Market: Limiting Risk and Ensuring Fairness: Hearing Before the H. Comm. on Financial Services*, 111th Cong. (Oct. 7, 2009) [hereinafter *Reform Hearings*] (statement of René Stulz, Everett D. Reese Chair of Banking and Monetary Economics, Fisher College of Business, The Ohio State University).

dominance of the U.S. based CDX Indices and EU based ITraxx Indices—now both owned and administered by Markit. Additionally, 2009 saw the creation of standardized contracts for single-name CDS. In the U.S. region, the most commonly traded instrument is the Standard North American Contract (SNAC) and in Europe the most common instrument is the Standard European Contract (STEC). The Indices, SNAC and STEC contracts are the most likely to be adopted readily by the derivatives community for central clearing.

While index and single name CDS are typically standardized and many are highly liquid, other types of CDS—such as CDS tranches, asset-backed CDS, or CDS on CDOs—are less so. Furthermore, the percentage of standardized contracts may be even lower in other asset classes. Unfortunately, there are limited data on the overall percentage of standardized derivatives contracts, due in major part to the lack of a uniformly accepted definition as to what constitutes a standard contract.

Even if a contract has standard terms, it may not be liquid in the sense that there is very little transaction volume. A lack of transaction volume for a contract means that, if a CCP were to clear the contract, it could be difficult for the CCP to determine accurate pricing for it, thereby substantially increasing the risk to the CCP if the marks and resulting margins prove inaccurate. CCPs will not accept such risk. Illiquid contracts also subject the clearinghouse to greater risk of loss in the event of a default of a clearinghouse participant since they will be harder to close out through novation or taking offsetting positions.⁸ As with standardization, we lack the data required to perform a full analysis of market liquidity. Some sources estimate that 20-36% of CDS are insufficiently liquid to be suitable for clearing.⁹ Some industry practitioners, however, have indicated that the percentage of currently traded CDS sufficiently liquid for clearing is likely to be higher (i.e., over 80% of currently traded CDS could be cleared).

b. Exclusion of Foreign Exchange Contracts

Certain parties have suggested that foreign exchange swap and forward contracts be entirely exempted from clearing requirements.¹⁰ The Senate bill exempts such contracts from clearing requirements,¹¹ while H.R. 4173 provides that such contracts would be exempt unless the CFTC and the Secretary of the Treasury determine otherwise.¹²

⁸ SYLVIE A. DURHAM, TERMINATING DERIVATIVE TRANSACTIONS: RISK MITIGATION AND CLOSE-OUT NETTING § 6.9 (Practising Law Institute 2009).

⁹ See Shane Kite, *Manual Market: Swapping Electrons for Paper*, in *Credit Default Contracts Paper Plain: Default Pacts Resisting Electronics*, FinReg21 (Nov. 16, 2009), available at <http://www.finreg21.com/news/manual-market-swapping-electrons-paper-credit-default-contracts-paper-plain-default-pacts-resis>. We derived this figure (36%) by subtracting from 100% the percentage of the CDS market deemed “most liquid” (5.1%) or “semi-liquid” (59%) according to the Fitch Ratings’ Global Liquidity Score.

¹⁰ *Reform Hearings*, supra note 7 (Statement of René Stulz); *The Effective Regulation of the Over-the-Counter Derivatives Market: Hearing Before the Subcomm. on Capital Markets, Insurance and Government-Sponsored Enterprises of the H. Comm. on Financial Services*, 111th Cong. (June 9, 2009) (statement of Timothy Murphy, Foreign Currency Risk Manager, 3M Company).

¹¹ Restoring American Financial Stability Act, 111th Cong. § 711(a)(4) (2009) (mark by the Chairman of the S. Comm. on Banking, Housing & Urban Affairs) [hereinafter Senate bill].

¹² H.R. 4173, 111th Cong. § 3101(a)(2)(C) (2009) [hereinafter H.R. 4173].

As discussed below, maximum reduction of systemic risk is generally achieved by clearing all type of contracts. Although some Committee members disagree, the majority of the Committee would therefore oppose an unbounded, blanket exemption of all foreign exchange contracts from clearing requirements. While foreign exchange contracts are settled through the CLS Bank, this reduces currency settlement risk by ensuring simultaneous transfer of the two legs of a foreign exchange contract; it does not reduce market risk or the credit risk resulting from the failure of one of the contract parties. However, the Committee would support an exemption for foreign exchange contracts with maturities of up to one month, where risks are limited, and would give the Federal Reserve the authority to extend the exemption for foreign exchange contracts with somewhat longer maturities.¹³ It is worth noting in this regard that an exemption for foreign exchange contracts with maturities of up to one month would cover the bulk of the foreign exchange market. According to the Foreign Exchange Committee, as of October 2008, the notional amount of the total monthly volume of foreign exchange swaps was \$3.1 trillion for contracts with terms up to one month, \$1.2 trillion for contracts with terms from one month to one year, and only \$88 billion for contracts with terms of over one year.¹⁴

c. The Determination of What Contracts Should be Centrally Cleared

The proposed House and Senate bills direct regulators to determine which contracts should be subject to a central clearing requirement.¹⁵ That determination is based on an array of factors including the standardization and liquidity of contracts. The Committee agrees with this approach, provided that regulators' determinations apply solely on a prospective basis.

While the House and Senate bills direct regulators to consider similar factors in deciding which contracts should be subject to clearing requirements, the Committee prefers the House approach, which gives regulators more discretion regarding the application of clearing requirements. The clearing requirement in the House bill applies only if the CFTC or the SEC has determined that a particular derivatives contract should be cleared,¹⁶ whereas required clearing is the default rule in the Senate bill.¹⁷ While the Senate bill permits the CFTC or SEC to issue an exemption from the clearing requirement, the CFTC and SEC can do so only with the consent of the Agency for Financial Stability.¹⁸ Even once an exemption has been granted, the Senate bill further specifies that if a party to a derivatives contract requests clearing for a contract that a CCP is willing to clear, the contract will need to be cleared.¹⁹

Subject to general principles established in legislation regarding standardization and liquidity, the Committee believes the Federal Reserve rather than market participants or CCPs

¹³ Throughout, consistent with our other reports, we would give the Federal Reserve exclusive authority to regulate clearing and settlement due to its centrality to systemic risk.

¹⁴ Foreign Exchange Comm., *Annual Report* (2008).

¹⁵ H.R. 4173, *supra* note 12, at §§ 3103(a)(3), 3203(a); Senate bill, *supra* note 11, at §§ 713(a)(3), 753(a).

¹⁶ H.R. 4173, *supra* note 12, at §§ 3103(a)(4), 3203(a).

¹⁷ Senate bill, *supra* note 11, at §§ 713(a)(3), 753(a).

¹⁸ *Id.*

¹⁹ *Id.*

should ultimately determine what types of contracts are centrally cleared. It would be inappropriate to leave the decision to CCPs, because CCPs are largely controlled by dealers and dealers may have too little incentive to opt for central clearing if it results in a narrowing of their spreads. On the other hand, the Federal Reserve should undertake a cost-benefit analysis before deciding to require clearing of a new category of contracts beyond what CCPs are themselves offering to clear. Any such action should be subject to the same standards of review and challenge as any other similar regulatory action under existing law.²⁰

2. Types of Counterparties

The Committee makes four basic points in this section. First, proposed legislation should be simplified by generally requiring that all standardized and liquid contracts between members of a clearinghouse be centrally cleared. Second, the proposed legislation should require all institutions that exceed defined net exposure thresholds to be made clearinghouse members if they qualify under reasonable and non-discriminatory standards. Third, any institution that meets or exceeds these thresholds but is ineligible for membership should be required to clear its contracts by obtaining a guarantee from a clearinghouse member. And fourth, although there are various risk management improvements and efficiency gains associated with central clearing, only systemic risk concerns warrant making clearing mandatory.

a. Requiring Contracts Between Clearinghouse Members to be Cleared

All standardized and liquid derivative contracts that only involve clearinghouse members should be centrally cleared. Difficulties arise, however, where one of the parties to the contract is not a CCP member. The number and value of these contracts may be significant. Estimates of the extent of dealer-to-dealer contracts vary (a very high percentage of dealer-to-dealer contracts would involve clearinghouse members). Our research indicates that 50-65% of credit default swap contracts are between dealers whereas DTCC reports an 80% figure.²¹ DTCC reports higher figures because they categorize trades involving a dealer on the one side and a prime

²⁰ See *Chamber of Commerce of the United States of America v. Sec. & Exch. Comm'n*, 412 F.3d 133, 144 (D.C. Cir. 2005) (holding that the SEC violated “its statutory obligation [under the Administrative Procedure Act] to do what it can to apprise itself—and hence the public and the Congress—of the economic consequences of a proposed regulation before it decides whether to adopt the measure”) and *Chamber of Commerce of the United States of America v. Sec. & Exch. Comm'n*, 443 F.3d 890, 894 (D.C. Cir. 2006) (holding that the SEC violated the Administrative Procedure Act by “relying on materials not in the rulemaking record without affording an opportunity for public comment”).

²¹ The Bank for International Settlements reports that in the first half of 2009 dealer-dealer CDS contracts were approximately 53% outstanding CDS contracts by notional value. Bank for Int’l Settlements, *OTC Derivatives Market Activity in the First Half of 2009*, at 8 (2009), http://www.bis.org/publ/otc_hy0911.pdf?noframes=1. The Depository Trust and Clearing Corporation [hereinafter DTCC] reports that as of December 11, 2009, approximately 80% of the total notional value of credit default swaps in its Deriv/SERV Trade Information Warehouse are dealer-to-dealer swaps. The DTCC reports that approximately 90% of credit default swaps traded throughout the world are cleared through the Deriv/SERV Trade Information Warehouse. See The Depository Trust and Clearing Corp., DTCC Deriv/SERV Trade Information Warehouse Reports, *available at* <http://www.dtcc.com/products/derivserv/data>.

broker on its customer's behalf on the other as "dealer-to-dealer."²² Data from the Bank of International Settlements (BIS) indicate that approximately 35-40% of the notional value of interest rate and foreign exchange derivatives contracts are inter-dealer contracts.²³ Suffice it to say that a significant percentage of contracts may involve a counterparty that is not a clearinghouse participant. Such non-clearinghouse participants may be financial institutions or non-financial companies.

The key issue is whether contracts involving a non-participant counterparty should be required to be centrally cleared. Both the House and Senate bills would generally require this, subject to some exceptions. The House bill would require all contracts between "dealers"—defined, roughly, as anyone in the business of trading in such contracts²⁴—to be centrally cleared even if one or both of the dealers were not members of a clearinghouse.²⁵ The House bill would also require central clearing of any contract between "major swap participants," defined as persons, other than dealers, who maintain a substantial net position or whose positions could create substantial net exposures among their counterparties.²⁶ Finally, the House bill would require all other persons (even if not a dealer or major swap participant) to centrally clear a contract unless the person was using swaps to hedge or mitigate commercial risks, e.g., corporations using swaps to hedge business risk (the corporate exemption).²⁷

The Senate bill follows a similar approach. Like the House bill, it requires central clearing of contracts where both counterparties are either dealers or major swap participants.²⁸ It then permits (but does not require) regulators to exempt contracts where one of the counterparties is not a "swap dealer" or "major swap participant" and "does not meet the eligibility requirements of any derivatives clearing organization that clears [such contracts]."²⁹ Its definition of "major swap participant" focuses solely on persons, other than dealers, whose

²² For example, suppose a hedge fund has a prime broker relationship with a "Dealer A" and that the hedge fund also trades with another dealer-counterparty, "Dealer B." Some sources classify such trades as dealer-to-dealer (between Dealers A and B) and others as dealer-to-customer (between hedge fund and Dealer B).

²³ Bank for Int'l Settlements, *supra* note 21, at 6-7.

²⁴ A "swap dealer" means any person who (i) holds itself out as a dealer in swaps; (ii) makes a market in swaps; (iii) regularly engages in the purchase of swaps and their resale to customers in the ordinary course of business; or (iv) engages in any activity that causes the person to be commonly known as a dealer or market maker in swaps. A person may also be designated a swap dealer for a single type or single class of or category of swap and considered not a swap dealer for other types, classes, or categories of swaps. H.R. 4173, *supra* note 12, at § 3101(a).

²⁵ *Id.* at §§ 3103(a)(4), 3203(a).

²⁶ A "major swap participant" is a person (non-dealer) who maintains a substantial net position in outstanding swaps, excluding positions held primarily to mitigate business risk; or whose outstanding swaps create substantial net counterparty exposure among the aggregate of its counterparties that could expose those counterparties to significant credit losses. *Id.* at § 3101(a).

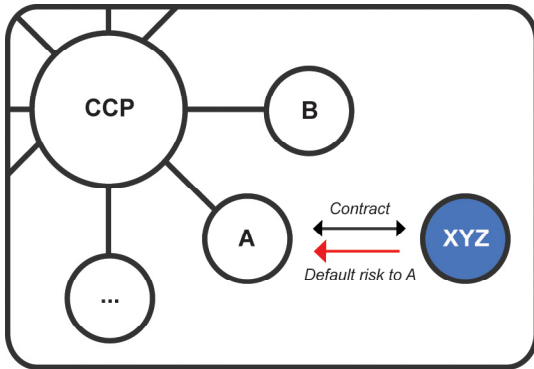
²⁷ The clearing requirement does not apply only if one of the counterparties is *not* a swap dealer or major swap participant *and* able to demonstrate the use of such swaps for mitigating business, operating, or commercial risk in a manner that accounts for the financial obligations associated with non-cleared swaps. *Id.* at §§ 3103(a)(4), 3203(a).

²⁸ Senate bill, *supra* note 11, at § 713(a)(2).

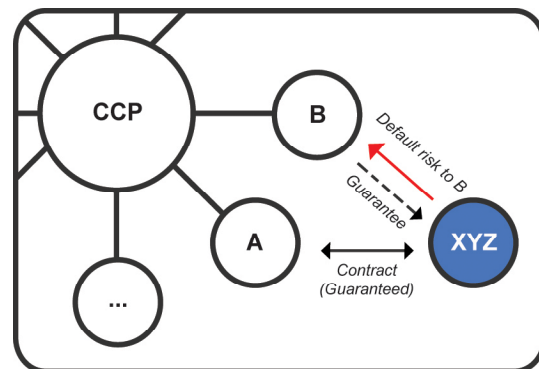
²⁹ *Id.*

positions could create substantial net exposure for their counterparties.³⁰ Unlike the House bill, however, the Senate bill does not establish a special corporate exemption.³¹

As stated above, all clearinghouse members stand behind each cleared trade. Contracts involving non-members, whether “dealers,” “major swap participants,” or others, may only be cleared through clearinghouse members. Because the CCP has very limited information about the riskiness of non-members, and therefore is unwilling to absorb their risk of default, the CCP will insist that a member guarantee any contract submitted by a non-member. This arrangement reduces the risk for the counterparty member by replacing that member’s exposure to the nonmember with exposure to the CCP. That same counterparty risk to the nonmember is then transferred to the guarantor member. For example, corporate XYZ enters into an OTC derivatives contract with Dealer A, a CCP member. CCP becomes a counterparty to A’s obligation to XYZ and also becomes a counterparty to XYZ’s obligation to A as guaranteed by Dealer B. While the risk of A’s default is reduced (since its counterparty is now the CCP), Dealer B is now exposed to the risk of default of XYZ through its guarantee. Since the losses from the default of a non-member of a clearinghouse are borne entirely by the member guarantor, clearing of contracts involving non-members does not facilitate loss mutualization. As such, the Committee’s basic recommendation is that the proposed legislation should generally not require clearing of contracts involving non-members. Our preference is that as many contracts as possible be cleared by members on both sides—use of guarantees is a second best solution.



Scenario 1: Corporate XYZ enters into an OTC derivatives contract with Dealer A, a CCP member. A is exposed to XYZ’s default risk.



Scenario 2: Same contract, but XYZ is guaranteed by Dealer B, a CCP member. The risk of XYZ’s default has merely been shifted from A to B.

This example notwithstanding, the Committee’s research indicates that dealers’ books are generally “flat”—they make profits on margins, not by taking speculative positions. Other large financial firms like, hedge funds, take speculative positions with dealers, who in turn enter into

³⁰ *Id.* at § 711(a)(7).

³¹ *Id.* at § 713(a)(2).

offsetting contracts with other dealers. Thus, the real risk of failure in the world of derivatives may be from large trading firms that are not dealers.

b. Requiring Membership in a Clearinghouse

In limiting mandatory central clearing of derivatives to contracts between clearinghouse members, it is important that institutions with substantial derivatives trading activity be members of a clearinghouse to assure maximum collectivization of failure risk.³² To ensure that limiting the central clearing requirement to contracts between clearinghouse members does not exclude systemically important institutions from coverage, the Committee therefore recommends that the proposed legislation require all institutions that exceed defined net exposure thresholds be made clearinghouse members if they qualify under reasonable and non-discriminatory standards.

The net exposure test would require each firm to calculate its net exposure to each of its counterparties, excluding exposure from swaps used to hedge commercial risk. The firm would then add up its net exposure to each of its counterparties to calculate its aggregate net exposure. Any firm whose aggregate net exposure is above the relevant threshold could be required to obtain membership in a relevant clearinghouse, subject to reasonable standards of solvency to ensure that the clearinghouse and its membership were adequately capitalized. Regulators should be given authority, to the extent they do not already have it, to adjust exposure thresholds to prevent firms from managing their exposure just below the cut-off, and to monitor membership criteria to ensure that existing clearing members do not establish discriminatory membership standards.

While the Committee is aware that certain potential clearing members do not have the ability to price and participate in default management, these services could be purchased from those that do. Thus, lacking these capabilities does not constitute an insurmountable obstacle to clearinghouse membership. On the other hand, the Committee acknowledges that purchasing the necessary services could be extremely expensive, in which case the Committee would recommend giving non-clearinghouse members greater clearinghouse access. More generally, the Committee recommends that those on the buy-side who wish to use central clearing (on a guaranteed basis) be granted this access on reasonable and non-discriminatory terms.

While the Committee anticipates that the net exposure threshold test will require all dealers to become clearinghouse members, it is unlikely to cover commercial companies. As stated above, “net exposure” would exclude exposures that arise from swaps used by companies

³² These institutions are not limited to systemically important swap dealers only. While we believe 50-65% of credit default swap contracts are between dealers (*see supra* note 21 and accompanying text), there are also many non-dealer counterparties to CDSs and other derivatives contracts whose activities in derivatives markets are sufficiently interconnected with other institutions to make them systemically important. For example, large hedge funds that generate significant net counterparty exposures may be systemically significant. This came to be seen as a major concern in the failure of the hedge fund Long-Term Capital Management in 1998, and remains so today. Beyond hedge funds, some commercial enterprises may generate large enough net counterparty exposures in the course of their business to argue for membership in a clearinghouse. Further, just as some *non*-dealer counterparties are systemically important, other *dealer* counterparties with comparatively insignificant net exposures are not. *See, e.g.*, PRESIDENT’S WORKING GROUP ON FINANCIAL MARKETS, HEDGE FUNDS, LEVERAGE, AND THE LESSONS OF LONG-TERM CAPITAL MANAGEMENT 21 (Apr. 1999), <http://www.ustreas.gov/press/releases/reports/hedgfund.pdf>.

to hedge commercial risk. The Committee supports this approach since there is limited (if any) market risk associated with swaps that are used purely to hedge. Moreover, the data suggest that contracts with commercial companies account for a small proportion of the derivatives market. BIS reports that, in the first half of 2009, only 5.1% of the gross market value of the global OTC interest rate derivatives market and 8.9% of the notional amount outstanding of global OTC interest rate derivative trades were comprised of contracts between dealers and commercial companies.³³ In the same period, 6.0% of the gross market value of the credit default swap market and 4.2% of the notional amount of credit default swap contracts consisted of contracts between dealers and commercial companies.³⁴ Morgan Stanley estimates that dealer trades with commercial counterparties comprise 9% of all derivatives trades, with a low of 0% for CDS trades to a high of 16% for foreign exchange trades.³⁵ Given these numbers, the aggregate systemic risk from contracts from commercial use is limited.

Because of the exclusion of swaps used to hedge commercial risk from the calculation of a firm's net exposure, any impracticality in accepting commercial companies as clearinghouse members may not constitute a major practical difficulty. Nevertheless, in principle, clearinghouse membership and clearing requirements should be applicable to commercial firms. An objective test focused on net exposure thresholds is fairer and more manageable for regulators to establish than a test that focuses on whether a firm is "commercial," "financial," or otherwise. Arbitrary distinctions between different types of firms would create incentives for regulatory arbitrage; firms could create "non-financial entities" to run systemically risky books.

The Committee acknowledges that there are divisions between some of its members on certain of these issues. For instance, some Committee members argue that it would be better to encourage firms to clear using member guarantees rather than requiring them to become clearinghouse members themselves. In the event that a firm fails, these Committee members argue, the use of a member guarantee will place an additional capital buffer between the firm and the clearinghouse. However, the majority of the Committee gives more weight to the fact that the use of a guarantee requires one party—the member guarantor—to bear the cost of the failure instead of spreading it out over the entire CCP membership.

Other Committee members believe the clearinghouse membership and related clearing requirements should not be triggered by a net exposure threshold but rather by a more holistic assessment of whether a company's derivatives portfolio poses systemic risk. These Committee members would favor the development of even stronger corporate exemptions.

c. Requiring Non-Members to Clear Using Member Guarantees

While many firms whose exposures exceed the defined net exposure thresholds could be admitted as clearinghouse members, some—including dealers that have lower capital, some

³³ Bank for Int'l Settlements, *supra* note 21. One year earlier, the comparable figures were 8.0% and 10.1%.

³⁴ *Id.* One year earlier, the comparable figures were 2.0% and 1.6%.

³⁵ Morgan Stanley, Intercontinental Exchange, Exhibit 6, at 9, Dec. 15, 2009.

hedge firms, as well as most (if not all) mutual and pensions funds³⁶—may not meet reasonable membership qualifications. When such firms do not qualify for clearinghouse membership, the Committee believes they should be required to clear their trades even if it means obtaining a member guarantee. While the guarantee may increase the risk of the guarantor member, clearinghouse members will generally be subject to higher levels of supervision than the firms whose positions they are guaranteeing and are, therefore, less likely to fail and set off a chain reaction of failures.³⁷ The likelihood of a chain reaction of failures could be even further reduced if clearinghouses and their regulators actively monitor the collateralization of member guarantees.

Some Committee members favor imposing an even broader clearing requirement on non-clearinghouse members, along the lines of the House bill. Some of these Committee members believe CCPs will generally offer better opportunities for netting contracts and segregating collateral, and will develop and consistently apply superior margining methodologies. Regarding segregation of collateral, these Committee members also argue that, in the event a significant dealer defaults, the default causes the aggregate of its customers' positions and margin to be frozen in its insolvency, creating a systemic liquidity disruption. Had the contracts been cleared, those positions and margin would be segregated and portable, with no disruption of the market. With respect to margining methodologies, there is a concern that high spreads on bilateral trades incentivize OTC dealers to take excessive risk.

Committee members who favor a broader clearing requirement on grounds that it would improve margining cite the Futures Clearing Merchant (FCM) model used by ICE and CME that allows non-clearinghouse members to clear. Although there are two variations of the FCM model, they both require daily variation margin to be paid in full between counterparties after daily mark-to-market of positions. The result is that no party is more than a single day's gain or loss exposed in the event of counterparty default. This practice might have significantly decreased the risk posed by AIG's derivative exposure. Furthermore, risk reduction is also achieved in the event of a counterparty failure. The best evidence of this is the CME experience with numerous contracts involving Lehman. While Lehman's OTC derivative counterparties are still tied up in bankruptcy proceedings, CME listed contracts were closed and settled in full in a single day.

To the extent one supports a broader clearing requirement, however, one must argue that banks are not adequately protecting themselves against risk in bilateral contracts with commercial companies. Our research indicates that dealers—the large banks—have a broad

³⁶ The Committee further notes that the net exposure threshold test would not require fund managers, as opposed to the funds themselves, to become CCP members.

³⁷ It should be acknowledged in our example that the risk of Dealer B becoming exposed to the default of XYZ is also present for bilateral contracts when XYZ uses a prime broker. In such a case, XYZ enters into a trade with Dealer A, where upon execution, both XYZ, Dealer A, and Dealer B agree to a give-up agreement, whereby Dealer B acts as a prime broker for XYZ. Post confirmation of the give-up, Dealer A faces Dealer B in a trade, and Dealer B faces XYZ. Dealer B is net \$0 market risk as it is long with Dealer A and short with XYZ but has counterparty risk from both Dealer A and XYZ. This is another reason for requiring dealer trades with financial institutions to be centrally cleared. On the other hand, commercial companies do not generally use prime brokers.

range of credit relationships with commercial companies, beyond becoming counterparties to OTC contracts, including lending and payment clearing services. The banks determine their credit exposure across all products to the corporate family and set limits on such exposure they think are appropriate. Often these positions are unsecured, requiring no collateral (including no initial margin on OTC contracts). But these collateral judgments depend on specific knowledge of the risks of their commercial counterparties unavailable to the clearinghouse, which takes a homogenous approach to margining. Some Committee members question, however, whether such bilateral margining is adequate.

Although the Committee believes there are not yet enough data to support a clearing requirement for all non-clearinghouse members on the grounds of margining, netting, and segregation, we do believe the legislation should direct the Federal Reserve to further study these issues. If the Federal Reserve finds that under-collateralization is a widespread problem or that the bilateral market does not offer sufficient netting and segregation opportunities, commercial companies, even without substantial net exposures, might have to become subject to the clearing requirement even if it means they will need to obtain member guarantees for their trades.

d. Efficiencies Provided by Central Clearing

Apart from the systemic risk concerns outlined above, there are also clear efficiency gains from clearing, but, in our judgment, only systemic risk concerns warrant mandatory clearing.

First, a CCP facilitates dynamic readjustment of the initial margin attached to a contract in response to changes in the credit quality of the non-member counterparty. Under current bilateral practice, a significant credit event that impairs the counterparty's solvency or jeopardizes its ability to perform, or a significant change in a contract's volatility, does not necessarily trigger readjustment of initial margin levels. But this is a result of industry practice and could in principle be changed by market participants.

Second, a CCP could alleviate dealers of the competitive pressure to attract business by reducing the amount of collateral they require from customers, whether in the form of initial or mark-to-market margins, eliminating a possible "race to the bottom" in collateral in the bilateral context. Most members of the Committee believe requiring dealers to establish prudent collateral levels can be accomplished through regulation and supervision without requiring a CCP, as discussed below under the heading of "Supervision of Financial Institutions."

Third, it may well be that CCPs can achieve economies of scale in providing trade processing services, such as segregation systems, the management, provision, and transfer of collateral, and dispute resolution procedures. Some members of the Committee believe these efficiencies also may reduce operational and eventually systemic risk. The Committee strongly supports segregation of initial margin, and while the Committee does not believe legislation should require initial margin for uncleared derivative contracts to be held in segregated accounts, since counterparties who prefer this arrangement can bargain for it, it does believe dealers should

be required to fully disclose collateral arrangements and offer counterparties the opportunity to segregate initial margin on a non-discriminatory basis with the agent of their choosing.³⁸ The Committee also supports the House bill's requirement that swap dealers offer segregation of bilateral collateral as an option, but acknowledges that the bill cannot assure that pricing for segregation will be deemed competitive with the non-segregated, and arguably systemically riskier, holding of collateral directly by the dealers.³⁹ If counterparties are indeed interested in the use of segregation systems or any of the other services that CCPs can offer more cheaply than other providers, the Committee assumes that, provided viable buy-side clearing options are available, these counterparties will insist on central clearing rather than resist it. These efficiencies do not *per se* provide a reason for imposing a clearing requirement on non-dealer counterparties.

Fourth, there are cases in which the use of CCPs can facilitate netting of derivatives trades. This is because cleared contracts are fully fungible within a clearing framework, and therefore continuously, automatically net down, whereas bi-lateral contracts require consent of all parties to novate or net. Because greater netting reduces systemic risk, some Committee members believe this by itself justifies a clearing requirement. But as Professors Duffie and Zhu observe, the use of a CCP does not necessarily increase netting.⁴⁰ For example, a CCP that clears one type of asset creates opportunities for multilateral netting in that asset class. Whether this results in an overall increase in netting turns on whether these gains are offset by the lost opportunities to net among different asset classes that might exist in the bilateral setting. Thus, whether the use of a CCP increases netting depends on multiple factors, including the range of assets that CCPs clear, and the agreements among clearing members and their nonclearing member customers to net among cleared and uncleared contracts.

It is also important to recognize that bilateral clearing may itself offer efficiency advantages, primarily by allowing more counterparty-specific margining that legitimately takes into account the underlying credit risk of the counterparty, something a CCP cannot do. If the efficiencies of using a CCP outweigh the costs, non-participants will volunteer to have their contracts centrally cleared without being mandated to do so. This assumes, however, that clearinghouses are not attempting to unreasonably exclude firms from using their facilities—regulators and antitrust officials should monitor clearinghouses to make sure this does not occur.

In summary, the basic reason to mandate central clearing is to reduce systemic risk, not to increase the efficiency of the OTC market. If central clearing is more efficient, it may be important to encourage it, but without mandating it, and market participants will eventually demand it themselves, absent restraints of trade. That said, regulators and antitrust officials should ensure that access to the use of clearinghouses, as well as to membership in a clearinghouse, be free of such restraints on trade.

³⁸ H.R. 4173, *supra* note 12, at §§ 3122, 3203(e); Senate bill, *supra* note 11, at §§ 718, 754.

³⁹ H.R. 4173, *supra* note 12, at §§ 3122, 3203(e).

⁴⁰ Darrell Duffie & Haoxiang Zhu, *Does a Central Clearing Counterparty Reduce Counterparty Risk?* (Stanford Univ., Working Paper, 2009), <http://www.stanford.edu/~duffie/DuffieZhu.pdf>.

e. Dealer Commitments to Increase Central Clearing

On September 8, 2009, the 15 largest OTC dealers (OTC-15) wrote to the Federal Reserve Bank of New York committing to submit for clearing certain percentages of “eligible” credit and interest rate derivative trades.⁴¹ With respect to credit derivatives, the OTC-15 agreed to individually submit for clearing 95% of new eligible trades and collectively submit for clearing 80% of new eligible trades.⁴² With respect to interest rate derivatives, the OTC-15 agreed to individually submit for clearing 90% of new eligible trades, collectively submit for clearing 70% of new eligible trades, and collectively submit for clearing 60% of trades that have historically been eligible for clearing. “Eligible trades” are trades that are supported for clearing by a recognized central counterparty with which both counterparties have a clearing relationship, which up to now have been a limited product subset restricted to dealer-to-dealer transactions.⁴³ Thus, standardized trades between clearinghouse members would be subject to a clearing requirement but contracts with non-clearinghouse counterparties would not be covered by the OTC-15 commitments.

C. The Scope, Number and Ownership of Clearinghouses

1. Scope and Number

A number of CCPs for derivatives are in operation and more are planned. This includes a number of smaller CCPs limited to a single type of contract or a single national market.⁴⁴ Concentration varies by type of contract. Clearing for interest rate swaps is more concentrated. LCH.Clearnet’s SwapClear has been in operation since 1999 and claims that it clears approximately half of the global inter-bank interest rate swap market.⁴⁵ CCPs for CDS contracts are more recent. In the U.S., ICE Trust began clearing CDS index contracts on March 9, 2009 and single-name CDS contracts on December 21, 2009.⁴⁶ A second US-based CCP for CDS,

⁴¹ Letter from the Senior Mgmt. of the OTC-15 to William C. Dudley, President, Fed. Res. Bank of N.Y. (Sept. 8, 2009), <http://newyorkfed.org/newsevents/news/markets/2009/ma090908c.pdf>. The OTC-15 are Bank of America-Merrill Lynch, Barclays Capital, BNP Paribas, Citigroup, Commerzbank AG, Credit Suisse, Deutsche Bank AG, Goldman, Sachs & Co., HSBC Group, JP Morgan Chase, Morgan Stanley, The Royal Bank of Scotland Group, Société Générale, UBS AG, Wachovia Bank, N.A.

⁴² The percentage of trades submitted for clearing on an individual basis is determined based on notional amounts, while the percentage of trades submitted for clearing on a collective basis is calculated using average weighted notional amounts.

⁴³ Letter from OTC-15, *supra* note 41, at Credit Default Swap Appendix and Rates Appendix. We understand that the OTC-15 are working with the CCPs and regulators to expand the range of counterparties eligible to clear trades.

⁴⁴ See EUR. CENT. BANK AND FED. RES. BANK OF CHICAGO, THE ROLE OF CENTRAL COUNTERPARTIES 18-19 (2007), <http://www.ecb.int/pub/pdf/other/rolecentralcounterparties200707en.pdf>.

⁴⁵ LCH.Clearnet Group Ltd., *2008 Annual Report and Consolidated Financial Statements* 8 (Sept. 22, 2009), http://www.lchclearnet.com/Images/FINAL%20low%20res_tcm6-52049.pdf.

⁴⁶ Press Release, IntercontinentalExchange, ICE Trust Begins Clearing CDS, Addressing Systemic and Operational Risks; Global Banks Begin Transferring Existing Bilateral Trades to ICE Trust (Mar. 10, 2009), *available at* <http://ir.theice.com/releasedetail.cfm?ReleaseID=369867>; Press Release, IntercontinentalExchange, ICE Trust Announces December 21 Launch for Single-Name CDS Clearing; Sees Twelve Active Firms in First Two Days of Buy-side Clearing (Dec. 16, 2009), *available at* <http://ir.theice.com/releasedetail.cfm?ReleaseID=430791>.

CME Clearing, began clearing CDS index contracts on December 15, 2009.⁴⁷ In Europe, Eurex Credit Clear began clearing CDS index contracts on July 30, 2009 and single-name CDS on August 28, 2009.⁴⁸ ICE Clear Europe began clearing CDS index contracts on July 29, 2009 and single-name CDS on December 14, 2009.⁴⁹ LCH.Clearnet planned to begin clearing European index contracts in January 2010.⁵⁰ Through December 31, 2009, ICE Trust has cleared \$3.3 trillion in index CDS and \$1.2 billion in single-name CDS and ICE Clear Europe has cleared €885 billion in index CDS and €566 million in single-name CDS.⁵¹ Transaction volume on Eurex is very low.⁵² CDS transactions subject to central clearing are a minority of all CDS transactions.⁵³

Some argue against the fragmentation of clearing arrangements, either in terms of the number of clearinghouses or differences in the types of contracts cleared by a particular clearinghouse, on the grounds that it reduces the benefits from netting. Research by Duffie and Zhu demonstrates the potential for this loss of margining efficiency.⁵⁴ If different types of contracts are cleared through different clearinghouses, benefits from offsetting positions of market participants in different types of contracts may be lost. For example, consider a case where Dealer A has an exposure of \$50 million to Dealer B from an interest rate swap and Dealer B has an exposure to Dealer A of \$100 million from a currency swap. If the dealers enter into a bilateral arrangement, the maximum loss (ignoring collateral) is \$50 million to Dealer B. If the contracts are subject to different clearing arrangements, the positions will not offset and the maximum total loss is \$150 million. A similar problem arises when there are multiple clearinghouses for the same contracts.

Though the Committee's Report concluded that the establishment of one or two well-capitalized clearinghouses for clearing all types of derivatives contracts would result in a substantial reduction in systemic risk, the Committee's current view is that there are benefits from having multiple, well-capitalized clearinghouses, with strong margining procedures. First, a

⁴⁷ Press Release, CME Group, CME Group Launches Credit Default Swaps Initiative; Begins Clearing Trades (July 29, 2009), *available at* <http://cmegroup.mediaroom.com/index.php?s=43&item=2972>.

⁴⁸ Press Release, Eurex Clearing, Eurex Credit Clear Successfully Starts CDS Clearing (July 31, 2009), *available at* http://www.eurexclearing.com/about/press/press_642_en.html; Press Release, Eurex Clearing, Eurex Credit Clear Clears First Single Name CDS Worldwide (Aug. 28, 2009), *available at* http://www.eurexclearing.com/about/press/press_647_en.html.

⁴⁹ Press Release, IntercontinentalExchange, ICE Clear Europe Launches European CDS Clearing (Aug. 28, 2009), *available at* <http://ir.theice.com/releasedetail.cfm?ReleaseID=399740>; Press Release, IntercontinentalExchange, ICE Clear Europe Launches Single-Name CDS Clearing; Nomura and BNP Paribas Join as CDS Clearing Members (Dec. 14, 2009), *available at* <http://ir.theice.com/releasedetail.cfm?ReleaseID=429831>.

⁵⁰ Jacob Bunge, *LCH.Clearnet Readies CDS Platform for January Launch*, DOW JONES NEWSWIRES, Dec. 10, 2009.

⁵¹ See ICE Report Center, <http://www.theice.com/marketdata/reports/ReportCenter.shtml?reportId=26> (last visited Jan. 10, 2010).

⁵² As of January 6, 2010, the open interest of CDS contracts on Credit Clear was €95,000,000. Data available at http://www.eurexclearing.com/markets/creditclear/credit_clear_volume_en.html (last visited Jan. 10, 2010).

⁵³ Jacob Gyntelberg, Karsten von Kleist & Carlos Mallo, *The Size of the Global CDS Market*, BIS Q. REV., Dec. 2009, at 24-25 (estimating monthly notional value of new CDS transactions appearing in the DTCC Deriv/Serv Trade Information Warehouse between approximately \$2.5 trillion and \$5 trillion per month for the months of January 2009 through July 2009), *available at* http://www.bis.org/publ/qtrpdf/r_qt0912y.htm.

⁵⁴ See Duffie & Zhu, *supra* note 40 and accompanying text.

lower number of CCPs would imply a greater concentration of risk. To the extent feasible, it would be better to avoid having CCPs that are “Too Big to Fail.” Second, having multiple clearinghouses would preserve competition that is potentially important, at the current early stage of development, for evolving the best frameworks for clearing OTC derivatives.⁵⁵ Since counterparties may be from different jurisdictions, CCPs should, to the extent possible, be international in scope, at least insofar as they clear the same contract. Regulators should also establish standards for recognizing CCPs operating in other jurisdictions to limit the possibility of cross-border arbitrage in global markets.

Furthermore, the Committee believes that clearinghouses should be organized according to asset class. Different asset classes have different risk profiles and are better handled by different risk management techniques. Assuming that it is more difficult for one CCP to manage risk across multiple asset classes than it is for multiple CCPs to handle risk from one asset class each, having multiple CCPs organized by asset class could be the safer option. On the other hand, the Committee acknowledges that some of its members do not believe there are risk management benefits to be gained by limiting clearinghouses to one asset class, and they are concerned that organizing CCPs by asset class will substantially increase the cost of clearing since there will be less risk diversification and netting, and because it will not be possible to spread the cost of capitalizing CCPs.

While a more limited number of clearinghouses would lead to greater netting and more efficient margining, less efficient margining will not lead to increased systemic risk as long as margin levels are sufficient. The Committee believes regulators must carefully monitor clearinghouses to make sure they require adequate margin. It is also worth observing that the efficiency gains from a reduced number of clearinghouses will gradually create market pressure for clearinghouses to consolidate. Over time, the market will ensure that the number of clearinghouses is not excessive.

It may be possible, in principle, to achieve the systemic risk reductions of multiple clearinghouses at the same time as the margining efficiency of a more limited number of clearinghouses by insisting on interoperability between clearinghouses, so that a net position in one clearinghouse could be netted against a position in another. While a desirable goal in itself, interoperability could be costly. It could also be risky if regulatory standards differed among interlinked clearinghouses. The Committee recommends that the Federal Reserve undertake a study of the extent to which interoperability between clearinghouses is feasible, or whether cross-margining efficiencies can be achieved without increasing risk, and without separately forcing interoperability in such a way that CCPs are discouraged from providing services.

To date, there have been several studies that have examined the risks arising from linkages between CCPs. The Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Commissioners have developed

⁵⁵ At the same time, the basic models should be consistent in terms of operational functionality. For example, clearing should be available on a same day basis given timely submission, clients should be able to engage multiple FCM's, and there should be options to the client in failure to clear situations.

recommendations for the evaluation and management of risks that arise from the linkage of CCPs.⁵⁶ The Joint Regulatory Authorities of LCH.Clearnet prepared a more detailed analysis of the risks from linkages between CCPs.⁵⁷ Their analysis highlights operational, legal, liquidity and settlement risks that arise from linkages between CCPs. They caution that linkages between CCPs may lead to an increase in systemic risk in the financial system. Actual experience with linkages between CCPs is limited. The establishment of linkages between CCPs involves many thorny operational, legal and oversight issues.⁵⁸ Several linkages have been established among European CCPs, although the overall level of integration remains low.⁵⁹ In our view, linkages do not offer a near-term solution to achieving maximum netting.

2. Ownership Restrictions

The Committee opposes limitations on who can own CCPs. In particular, the Committee is concerned that control restrictions in H.R. 4173 will discourage the formation of and membership in CCPs. H.R. 4173 prohibits swap dealers and major swap participants (collectively, restricted owners) from acquiring a direct or indirect interest in a CCP or in any person that has a controlling interest in a CCP, where such acquisition would allow restricted owners to collectively control 20% of the votes to be cast on any matter.⁶⁰ In addition, the bill would prohibit a majority of a CCP's directors from being "associated with" any particular restricted owner.⁶¹ These restrictions are intended to reduce conflicts among members, or reduce the risk that members will act in their own self-interest rather than the interest of the CCP. However, the limitation in the control rights of restricted owners could mean that the members that are restricted owners would be contributing capital and bearing risk but without exercising rights relevant to managing risks to which their capital is exposed. This could create a disincentive for membership by swap dealers and major swap participants in CCPs. On the other hand, the restrictions could be ineffective at limiting restricted owners from controlling a CCP since one can exercise control without ownership if one is the major value-added source for running a business. Legal forms can also be used to ensure that dealers profit from an entity without owning it, as in the case of ICE Trust.⁶²

⁵⁶ Bank for Int'l Settlements, *Recommendations for Central Counterparties* (2004), available at <http://www.bis.org/publ/cpss64.htm>.

⁵⁷ Joint Regulatory Authorities of LCH.Clearnet Group, *Investigation of Risks Arising From the Emergence of Multi-Cleared Trading Platforms* (2008), http://www.dnb.nl/en/binaries/Investigation%20of%20risks%20arising%20from%20the%20emergence%20of%20multi-cleared%20trading%20platforms_tcm47-216876.pdf. The Joint Regulatory Authorities include regulators in Belgium, France, the Netherlands, Portugal, and the U.K. that have supervisory authority over LCH.Clearnet Group.

⁵⁸ See, e.g., Duffie, *supra* note 5, at 14.

⁵⁹ See George Kalogeropoulos, Daniela Russo & Andreas Schonenberger, *Link Arrangements of Central Counterparties in the EU—Results of an ESCB Survey*, in EUR. CENT. BANK AND FED. RES. BANK OF CHICAGO, *supra* note 44, at 52 (providing a listing of linkages between CCPs).

⁶⁰ H.R. 4173, *supra* note 12, at § 3306(a)(2)(A).

⁶¹ *Id.*

⁶² *Breakfast with ICE CEO Jeff Sprecher*, TRADING TALK (Rosenblatt Sec. Inc., New York, N.Y.), Dec. 21, 2009, at 2.

The Committee recommends that Congress adopt a more direct solution to potential conflicts by subjecting CCPs to strict regulatory oversight. As stated above, regulators should review CCP rules and practices to ensure that membership and access policies are non-discriminatory.

D. Transaction Reporting

The Committee's May Report recommended the adoption of reporting requirements for derivatives transactions and the development of a system for dissemination of transaction data similar to the TRACE system for corporate bond transactions. The Committee supports measures in the proposed legislation that further that goal, including requirements for the reporting of derivatives transactions to data repositories, and for CCPs and data repositories to disseminate aggregate data on trading volume, transaction prices, quotations and open interest to the public.⁶³ Such data should be disclosed no less frequently than daily. The Committee also supports studies such as those specified in the House bill that would form the basis for the development of algorithms to characterize derivatives contracts in a standardized, industry-wide form.⁶⁴

Greater transparency will improve price discovery and reduce transaction costs in derivatives markets. Academic studies have found that the introduction of the TRACE system has reduced transaction costs and improved the speed at which corporate bond prices adjust to new information.⁶⁵ Better information concerning the pricing of derivatives contracts can also improve the pricing of the underlying security or asset. This is particularly true when the underlying security or asset is illiquid.

Greater transparency in derivatives markets will also aid in the supervision and operation of CCPs and be beneficial to investors. Information on the transaction prices of contracts will assist CCPs in marking positions.

Nevertheless, the Committee is aware that an immediate reporting requirement for all trades—as opposed to trades that occur on an exchange, which are automatically captured and reported—could be costly. We would, therefore, support a modest delay in reporting most trades, allowing a reduction of cost through a bunching procedure.

The Committee also is aware of the potential damage from applying continuous reporting requirements to large derivatives trades. The issues are analogous to those involved in reporting “block trades” in the equity context. If traders know someone is shopping or seeking to acquire a large position, traders will take advantage of this knowledge. This, in turn, will make block sales or purchases less likely and reduce liquidity. We thus recommend that the Federal Reserve

⁶³ H.R. 4173, *supra* note 12, at §§ 3103(a)(3), 3103(b)(3), 3109, 3203(a); Senate bill, *supra* note 11, at §§ 713(a)(3), 713(b)(4), 753(a).

⁶⁴ H.R. 4173, *supra* note 12, at § 3005.

⁶⁵ See Amy K. Edwards et al., *Corporate Bond Market Transaction Costs and Transparency*, 62 J. FIN. 3 (2007); Hendrik Bessembinder et al., *Market Transparency, Liquidity Externalities, and Institutional Trading Costs in Corporate Bonds*, 82 J. FIN. ECON. 2 (2006).

permit delayed reporting for transactions that are large compared to average volume or that involve contracts that infrequently trade.

E. Derivatives Exchanges

In the Report, the Committee supported passing legislation that would require exchange trading of certain derivatives. While exchange trading of derivatives would further reduce systemic risk over and above what can be achieved through central clearing, the Committee now believes exchange trading should not be required but encouraged where appropriate.

The House bill does contain an exchange trading requirement, which would mandate that derivatives contracts subject to clearing requirements be traded on a regulated exchange or registered “swap execution facility.”⁶⁶ Similarly, the Senate bill requires derivatives contracts that are subject to clearing requirements to be traded on a regulated exchange or registered “alternative swap execution facility.”⁶⁷ However, in both bills, the exchange trading requirements do not apply unless an exchange-traded contract is available. We agree that legislation cannot mandate trading interest, and to the extent that legislation includes an exchange trading requirement, we agree with giving regulators authority to determine which contracts would be subject to the requirement.⁶⁸ On the other hand, we are concerned that the overly broad definition of “swap execution facility” in the House bill and the lack of definition of “alternative swap execution facility” in the Senate bill would not guarantee the use of trading platforms with sufficient liquidity or transparency. In fact, the proposed definitions could codify current practices, permitting trades to continue to be executed through voice-brokerage facilities.

To the extent that legislation involves an exchange trading requirement, the only alternative to trading on an organized exchange should be trading on a platform along the lines of an “alternative trading system”—which the SEC defines as an organization, association, person or system that provides a marketplace or facilities for bringing together buyers and sellers—or an another venue that is appropriately regulated in light of the transparency objectives of the

⁶⁶ H.R. 4173, *supra* note 12, at §§ 3103(a)(3), 3203(c). The House bill defines a “swap execution facility” as a “person or entity that facilitates the execution or trading of swaps between two persons through any means of interstate commerce, but which is not a designated contract market, including any electronic trade execution or voice brokerage.” *Id.* at §§ 3101(a)(3), 3201(a)(6). To be registered, such a swap execution facility would need to comply with certain requirements, including a requirement to maintain rules designed to prevent market manipulation. *Id.* at §§ 3109, 3203(d).

⁶⁷ Senate bill, *supra* note 11, at §§ 713(a)(3), 753(a). The Senate bill does not define “alternative swap execution facility.” As a result, while a voice brokerage between two persons would qualify as a “swap execution facility” under the House bill, it is unclear whether it could be deemed an “alternative swap execution facility” under the Senate bill. However, to be registered, an alternative swap execution facility would need to set position limits or position accountability requirements designed to stop market manipulation and congestion. *See id.* at §§ 720, 753(b).

⁶⁸ *See supra* note 15 and accompanying text.

legislation.⁶⁹ Some Committee members argue that an alternative trading system for OTC derivatives may need greater regulation than one for cash securities. According to these Committee members, additional regulation may be needed, first, because of the nature of the products involved. Second, if alternative trading systems for derivatives are as lightly regulated compared to derivatives exchanges as alternative trading systems for cash securities are relative to exchanges for cash securities, it could drive activity away from derivatives exchange.

Exchange trading offers a number of benefits. Exchanges aggregate bid and ask quotations from multiple dealers. Increased competition among dealers enhances price discovery and ensures that participants will obtain the best price for a contract. Exchange trading also allows for the real-time dissemination of transaction price and quote data. Increased availability of more accurate pricing information is useful in the determination of collateral and margin requirements for contracts that are not exchange-traded, as well as those that are. CCPs may also benefit from the presence of an exchange in the event of the failure of a clearinghouse member. The presence of an exchange may facilitate the orderly disposition of a failed member's contracts, as was shown in the liquidation of Lehman's listed futures portfolio within days of Lehman's collapse, without disruption of the futures market. In short, exchange trading will increase efficiency and reduce systemic risk by producing better price information and a more liquid market. The Committee acknowledges that these are important public goods.

The expansion of exchange trading of derivatives contracts has widespread international support. At its September summit, the G-20 agreed that "all standardized OTC derivative contracts should be traded on exchanges or electronic platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest."⁷⁰ The U.K.'s FSA December 2009 position paper has, however, argued that an exchange trading requirement is not necessary to reduce systemic risk or improve transparency, and that market forces should be allowed to determine trading structures.⁷¹ A majority of Committee members are concerned, however, that the spread advantages dealers recognize by not trading on exchanges may overcome market forces that might otherwise lead to exchange trading. Opposition to exchange trading based purely on dealers' interest in maintaining spreads lacks a sound public policy basis and should not be permitted to prevail.

⁶⁹ The SEC's formal definition of an "alternative trading system" is "any organization, association, person, group of persons, or system: (1) [t]hat constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange within the meaning of Rule 3b-16 under the Securities Exchange Act of 1934; and (2) [t]hat does not: (i) [s]et rules governing the conduct of subscribers other than the conduct of such subscribers' trading on such organization, association, person, group of persons, or system; or (ii) [d]iscipline subscribers other than by exclusion from trading." Regulation of Exchanges and Alternative Trading Systems, 63 Fed. Reg. 70,844, at 70,922 (Dec. 22, 1998).

⁷⁰ G-20, *Leaders' Statement: The Pittsburgh Summit* (Sept. 2009), http://www.g20.org/Documents/pittsburgh_summit_leaders_statement_250909.pdf.

⁷¹ Fin. Serv. Authority & HM Treasury, *Reforming OTC Derivative Markets: A UK Perspective* (2009), http://www.hm-treasury.gov.uk/d/hmt_fsa_otcderivativemarkets.pdf.

F. Supervision of Financial Institutions

Some financial institutions have large exposures arising from derivatives contracts with non-financial corporations. The OCC reports that as of September 30, 2009, 41% of the total net counterparty credit exposure from derivatives contracts of U.S. commercial banks was due to contracts with corporations.⁷² It is possible that such contracts will not be centrally cleared due to the types of contracts and counterparties involved.

H.R. 4173 and the Senate bill address capital requirements and margin requirements for both banks and non-banks that have positions in derivatives. The primary difference between the two bills concerns the level of flexibility afforded regulators in setting capital requirements. H.R. 4173 directs regulators to set capital requirements that ensure the safety and soundness of swap dealers and major swap participants and that are appropriate to the risk of a non-cleared swap.⁷³ The Senate bill sets certain minima. The Senate bill directs regulators to set capital requirements for non-bank swap dealers and major swap participants that are to be as strict as or stricter than the requirements for banks; capital requirements for swaps that are cleared are to be greater than zero; and “substantially higher” capital requirements for non-cleared swaps are required than for swaps that are cleared.⁷⁴ The Committee suggests that it may be appropriate to exclude firms from such capital and margin requirements if their net derivatives exposures do not exceed designated thresholds.

The Committee supports having regulators carefully scrutinize the adequacy of capital requirements for non-centrally cleared derivatives contracts and mandate minimum capital levels needed to ensure sufficient reserve against the risk these contracts create. But, the Committee also believes Congress should avoid placing unnecessary constraints on regulators in determining appropriate capital requirements for different types of financial institutions, since capital requirements that are not appropriate to the risk of the institution and the position can give rise to regulatory arbitrage. In this instance, regulatory arbitrage would involve the shift of transactions away from institutions that are best able to bear the risk and towards those institutions that are able to bear the risk at lower costs only because they are subject to lower capital requirements. The Committee believes Congress should avoid the potential to create such distortions by following the approach in H.R. 4173 and allowing regulators greater discretion in setting capital requirements.

The Committee also believes capital requirements used by U.S. regulatory authorities should be harmonized with capital requirements arising from international agreements. The requirement in the Senate bill that capital requirements for cleared swaps be greater than zero may differ from requirements in international capital accords. The Basel Committee on Banking Supervision’s recent consultative paper supports a zero risk weight for banks’ exposures to

⁷² COMPTROLLER OF THE CURRENCY ADMIN. OF NAT’L BANKS, OCC’S QUARTERLY REPORT ON BANK TRADING AND DERIVATIVES ACTIVITIES 4 (Third Qtr. 2009).

⁷³ H.R. 4173, *supra* note 12, at §§ 3107, 3204.

⁷⁴ Senate bill, *supra* note 11, at §§ 717, 753(d).

CCPs.⁷⁵ Similarly, the European Commission's Capital Requirements Directive assigns a zero risk weight to credit risk exposures for contracts cleared through a CCP as long as the CCP fully collateralizes its exposures on a daily basis.⁷⁶ Regardless of what risk weights are "right" on the merits, international differences can give rise to regulatory arbitrage. This is another reason to favor the more flexible approach of H.R. 4173.

G. Conclusion

We believe that increased use of clearinghouses can substantially reduce the interconnectedness problem. Mutualization of losses significantly reduces the possibility of a chain reaction of failures caused by counterparty relationships. Indeed, the Committee believes this is the central issue in systemic risk today. Since not all OTC contracts are standardized or liquid enough to be cleared, clearing is unfortunately not a silver bullet. But it is crucial, particularly since we believe the proportion of standardized and liquid contracts has and will continue to increase over time.

One cannot come to this topic without realizing the substantial mistrust that exists among industry participants. We have all heard the charges. Dealers are said to oppose central clearing or exchange trading since it will compress margins. Non-dealers fear that clearing will force them to post excessive collateral and that CCP margining is otherwise insufficiently flexible. Nonetheless, we have also noticed a major change in the atmosphere since last spring. There is agreement within the industry and among informed observers that the stability of the financial system depends on solving these problems. In addition, there is widespread consensus about many of the core elements of the solution. As a result, we are reasonably hopeful that the path-breaking work of the House and the continuing efforts of the Senate will lead to important and needed legislation.

Respectfully submitted,



R. Glenn Hubbard

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cc: Senator Jack Reed
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⁷⁵ Basel Comm. on Banking Supervision, Consultative Document, "Strengthening the resilience of the banking sector," Dec. 2009, *available at* <http://www.bis.org/publ/bcbs164.pdf>, at 6.

⁷⁶ European Parliament and Council Directive 2006/48/EC, June 14, 2006 (relating to the taking up and pursuit of the business of credit institutions), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:177:0001:0001:EN:PDF>.