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An Examination of Lehman Brothers' Derivatives Portfolio Post-Bankruptcy and Whether Dodd-Frank Would Have Made Any Difference

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I. Introduction

In the two and a half years since 157 year-old Lehman Brothers made the largest bankruptcy filing in United States history, the regulatory and financial landscape has shifted in many ways. As expected after any market crash of such severity and duration, policymakers considered, among many issues, whether the U.S. Bankruptcy Code functioned effectively and concluded that it had not. Ben S. Bernanke, Chairman of the Board of Governors of the Federal Reserve System, testified to the House Committee on Financial Services on October 1, 2009 that:

> In most cases, the federal bankruptcy laws provide an appropriate framework for the resolution of nonbank financial institutions. However, the bankruptcy code does not sufficiently protect the public's strong interest in ensuring the orderly resolution of a nonbank financial firm whose failure would pose substantial risks to the financial system and to the economy. Indeed, after Lehman Brothers' and AIG's experiences, there is little doubt that we need a third option between the choices of bankruptcy and bailout for such firms.[1]

Congress and the White House enshrined that third option into Title II of the Wall Street Reform and Consumer Protection Act ("Dodd-Frank"), signed into law by President Obama on July 21, 2010. Title II of Dodd-Frank promulgated an entirely new insolvency regime for large, interconnected financial companies whose possible failure would portend the sort of economic devastation that policymakers assumed the Lehman Brothers bankruptcy unleashed.

The purpose of this paper is to examine how Lehman Brothers' bankruptcy has unfolded to date with respect to its U.S. derivatives portfolio and how that would be different had Dodd-Frank been in effect in September 2008. The paper concludes that with respect to the derivatives portfolio of any failed "systemically important" company captured by the resolution procedures of Title II of Dodd-Frank, Congress' efforts neither resulted in a change to the way derivative trades are handled post-bankruptcy nor provided comfort that a government bail-out of a clearinghouse will be avoided.

II. Lehman Brothers – How Has Its Derivatives Portfolio Fared Post-Bankruptcy?

Contemporary financial institutions, particularly those that are arguably most systemically important, operate globally. A mix of banks, broker-dealers, commodity brokers, futures commission merchants, corporations and insurance companies operate under the financial institution's umbrella and engage in business twenty-four hours a day, seven days a week, in dozens of jurisdictions. Upon insolvency, each entity becomes subject to its own insolvency

1 Testimony of Ben S. Bernanke, Chairman of the Board of Governors of the Federal Reserve System, to the U.S. House of Representatives Committee on Financial Services, (October 1, 2009), 7.

regime, depending upon its jurisdictional location, its organizational form and its activities. Lehman Brothers' bankruptcy, in the broadest sense, involved five bodies of laws applicable to its various corporate entities: first, the Federal Deposit Insurance Act applied to its U.S. banks[2]; second, the Bankruptcy Code applied to its insolvent corporations, such as its Delaware corporations that traded derivatives, including Lehman Brothers Special Financing, Inc.; third, the Securities Investor Protection Act regime applied to the insolvent broker-dealer, Lehman Brothers Inc.; fourth, state insurance laws applied to its insurance subsidiaries; and lastly, over 80 jurisdictions' insolvency laws applied to the insolvent non-U.S. Lehman Brothers entities[3].

As noted above, Lehman Brothers Special Financing, Inc. ("LBSF") was the primary, although not the exclusive, entity through which Lehman Brothers' U.S. derivatives business was done. Outside of the United States, derivatives transactions were done through Lehman Brothers International (Europe) ("LBIE").[4] When Lehman Brothers filed for bankruptcy, the U.S. estate reported that it was a counterparty to 930,000 derivatives transactions documented under 6,120 ISDA Master Agreements.[5] The vast majority of those derivatives transactions involved LBSF, a Delaware corporation, with documentation being executed pursuant to the industry standard ISDA Master Agreement.[6] While the exact size of LBSF's derivatives portfolio pre-bankruptcy has not been published, Lehman Brothers' global derivatives portfolio was estimated to be $35 trillion in notional value, representing about five percent of derivatives transactions globally.[7]

Under the ISDA Master Agreement, upon a counterparty's (or guarantor's) default such as a voluntary or involuntary bankruptcy, the non-defaulting party has the right to designate a date on which the portfolio of derivatives will be valued and terminated, to terminate the transactions on such date and to liquidate and apply any collateral. Once Lehman Brothers Holdings Inc. filed for bankruptcy on September 15, 2008, its status as the guarantor for LBSF's derivatives transactions meant that non-defaulting parties were able to elect to terminate their transactions, even though LBSF did not file for bankruptcy until October 3, 2008. Approximately 80 percent of the derivatives counterparties to LBSF terminated their

2 Note that Aurora Bank and Woodlands Commercial Bank just received approval from the Federal Deposit Insurance Corporation to sell their respective businesses. Those entities did not immediately file for bankruptcy, but recently, became unable to meet their capital requirements. [Update.]

3 Lehman Brothers Holdings Inc. State of the Estate (September 22, 2010), 8. See also The Financial Crisis Inquiry Report, 340.

4 Note that this paper does not address how derivatives claims against LBIE are proceeding.

5 Lehman Brothers Holdings Inc. First Creditors Section 341 Meeting, January 29, 2009, 19-20 (www.lehmanbrothersestate.com). Note that the Lehman Brothers Holdings Inc. The State of the Estate (November 18, 2009), 28, reports a slightly different figure of 6,355 contracts.

6 Note that other U.S. Lehman entities engaged in derivatives trading, but LBSF was by far the largest among the U.S. entities trading.

7 Bank for International Settlement, "Semiannual Over-The-Counter (OTC) Derivatives Markets Statistics", www.bis.org/statistics, June 2009.

derivatives transactions under the ISDA Master Agreement within five weeks of bankruptcy.[8] In those transactions where the non-defaulting party owed LBSF money, those amounts were paid. If LBSF, on the other hand, owed money to the non-defaulting party, such amounts were not paid.

The estate has been successful, almost immediately post-bankruptcy, in capturing these receivables. On September 14, 2008, the estate reported that LBSF had a then-current cash position of $7 million. Within three and a half months, LBSF had a current cash position of $925 million.[9] By November 18, 2009, the Lehman estate reported that figure had grown dramatically to $5.025 billion dollars in current cash and investments[10] for LBSF; adding in the other U.S. entities involved in trading derivatives, increased that figure to $8 billion.[11] By June 30, 2010, LBSF had approximately $7.355 billion in current cash and investments[12], and $11.467 billion when including the other Lehman entities[13], reaching $8.79 billion as by February 1, 2011[14], and $15 billion in aggregate being received to the credit of the estate.[15] LBSF represents nearly half of all cash and cash investment positions as compared to the aggregate of the other Lehman U.S. debtor entities.[16]

After two and a half years, challenges still remain with respect to winding down Lehman Brothers' U.S. derivatives portfolio. While the administrator has worked effectively to increase the assets of the estate, as noted above, and the ISDA Master Agreement offered a well-understood process and approach to calculating the value of terminated transactions, these factors have not lessened the sheer magnitude of effort involved in unwinding the most complex derivatives business in history. While the vast majority of counterparties quickly terminated their derivatives transactions with U.S. Lehman Brothers entities, including LBSF, that did not mean that the process was at an end. Rather, a multi-step process for reconciling, reviewing counterparty valuations of the terminated transactions and then moving to settlement is required. The last time Lehman Brothers published its resolution process figures in November 2009, 61 percent of derivatives claims had been reconciled and 50 percent had their valuation completed.[17] In that same report, the estate reported that LBSF had 3,222 claims against it, presumably all or mostly all derivatives claims. This figure represented at the time five percent by volume and eleven

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8 Debtors' Motion for an Order pursuant to Sections 105 and 365 of the Bankruptcy Code to Establish Procedures for the Settlement or Assumption and Assignment of Prepetition Derivatives Contracts, Lehman Brothers Holdings Inc., *et al*, No. 08-13555 (U.S. Bankr. Ct., S.D.N.Y. November 13, 2008).

9 Lehman Brothers Holdings Inc. First Creditors Section 341 Meeting, January 29, 2009, 6 (www.lehmanbrothersestate.com). (Reflects figures as of January 2, 2009).

10 Lehman Brothers Holdings Inc. The State of the Estate (November 18, 2009), 9.

11 *Ibid.*, 26.

12 Lehman Brothers Holdings Inc. The State of the Estate (September 22, 2010), 10.

13 *Ibid.,* 11.

14 Monthly Operating Report (February 2011); Case No. 08-13555 (March 18, 2011).

15 Lehman Brothers Holdings Inc. Plan Status Report (January 13, 2011), 16.

16 Lehman Brothers Holdings Inc. The State of the Estate (September 22, 2010), 10.

17 Lehman Brothers Holdings Inc. The State of the Estate (November 18, 2009), 28.

percent by dollars, of the top five debtor entities claims in aggregate.[18] It is assumed that progress has continued since the intervening 16 months.

As the estate's work progressed, the administrator took the view that many counterparties were inflating their derivatives claims. Daniel Ehrmann, a managing director at Alvarez & Marsal and co-head of derivatives at Lehman Brothers Holdings Inc. stated that "…we discovered that out of all the claims against the Lehman estate, those in the derivatives subset were most inflated."[19] In fact, in April 2010, Lehman Brothers Holdings Inc. sued Nomura Holdings Inc., arguing that Nomura's $720 million of derivatives claims relating to 2,464 transactions were the product of "egregious inflation" and reflected a desire to "secure a windfall" from Lehman's bankruptcy at the expense of creditors.[20] Indeed, the week prior to Lehman Brothers' bankruptcy, Nomura reported that it owed money to LBSF of over $200 million.[21] At the time of this paper, the case had not settled and depositions were underway.

While the mechanics of the ISDA Master Agreement functioned effectively (and quickly post-bankruptcy) such that the vast majority of derivatives transactions were terminated, the legal obligations imposed on the administrator are such that a high standard of care is required before claims can be finalized for settlement. The statutory duties of the trustee in a Chapter 11 case are set forth in Section 1106 of the U.S. Bankruptcy Code[22]. In addition, case law imposes fiduciary obligations on a trustee, including treating all beneficiaries fairly and equally.[23] With thousands of derivatives claims, the administrator has a fiduciary duty to review and reconcile the process and conduct of how each non-defaulting party reached its early termination amount relating to each derivative trade – this for over 6,000 counterparties and around one million transactions. The goal of this painstaking but required process is to ensure that no creditor is preferred over another and to maximize the size of the estate for the benefit of all creditors. Practically, what this means is that the administrator conducts daily meetings with creditors to review the proposed settlement of each derivative claim – in essence, the early termination amount for each individual derivative transaction must be reviewed in accordance with the administrator's fiduciary duty requirements to ensure that the estate's beneficiaries are being treated fairly and equally. By the end of the third quarter 2010, two years after Lehman Brothers' bankruptcy, the administrator reported that 45.6 percent of derivatives counterparties' claims had been settled.[24] .

The settlement of the derivatives portfolio should be considered in the context of the overall bankruptcy process to date. On March 15, 2010, Lehman Brothers Holdings Inc. and its twenty-two affiliated Chapter 11 debtors filed a joint Chapter 11 plan with the U.S. Bankruptcy Court for the Southern District

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18 *Ibid.*, 32. Duplicate claims were often filed against LBSF and the parent company, but LBSF had a relatively small percentage of the claims made against the various U.S. Lehman Brothers entities as most were understandably against the parent company.

19 Cameron, Matt, "LBHI Administrators Push for Settlement of Derivatives Claims," Risk (March 2, 2011).

20 Adversary Complaint and Objection filed by Lehman Brothers Holdings Inc. in Bankr. Ct. S.D.N.Y. (April 23, 2010), 2.

21 *Ibid.*, 3.

22 11 U.S.C. §1106.

23 Restatement (Second) of Trusts §§ 170, 174 and 183.

24 Liquidation plan filed with the Southern District of New York on January 25, 2011. [Need more precise cite].

of New York. The following month Lehman Brothers filed with the bankruptcy court its liquidation plan. The liquidation plan called for maintaining the corporate distinction of each Lehman entity that had filed for bankruptcy in 2008. This was a key point as it ensured that each affiliate would make payments to its creditors on the basis of its own asset base. However, creditors of the parent company, Lehman Brothers Holdings Inc., argued that parent company guarantees of affiliates such as LBSF meant that more debt resided at the parent level while assets were at the subsidiary level. For example, Lehman Brothers Holdings Inc. reported $2 billion in cash and investments on June 30, 2010, whereas LBSF had $7.35 billion in cash and investments.[25] Perhaps not surprisingly, a group of ten creditors, led by Paulson & Co., Canyon Partners LLC, the California Public Employees Retirement System and Pacific Investment Management Co. countered with their own liquidation plan on December 15, 2010, proposing to consolidate all affiliates' assets into one Lehman entity – resulting in holders of parent company claims receiving more than if the corporate entity structure remained intact. This group of ten represents $20 billion of Lehman Brothers Holdings Inc. claims, including $16 billion of senior bonds in an $80 million class.[26] In essence, the claims of derivatives creditors would be slightly reduced to the benefit of the bondholders under this creditor group's proposal.

In response, on January 25, 2011 Lehman Brothers filed an amended version of its liquidation plan seeking compromise with those creditors.[27] The new plan proposed to retain the corporate formalities of each debtor entity, but to re-distribute the payouts made to certain creditors. In essence, between 20 and 30 percent of payments owed to creditors of various operating companies, such as LBSF, would be forfeited and re-allocated to the parent company's creditors. For example, under Lehman Brothers' April 2010 plan, derivatives creditors of LBSF, such as Bank of America, Credit Suisse and Goldman, Sachs, would have received a 24.1 percent payout, while in the amended January 2011 liquidation plan, those derivatives creditors would receive a 22.3 percent payout, as creditors of the parent entity received slightly more than originally proposed. Goldman, Sachs has been reported to not be satisfied with either plan and as of the date of this paper is considering proposing its own. The investment bank has filed claims of $2.5 billion against LBSF and filed a duplicate claim against Lehman Brothers Holdings Inc. based on the guarantees made by the parent to its affiliate.

As part of Lehman Brothers' January 2011 revised liquidation plan, a derivatives claims settlement framework was included. The framework offers a standardized methodology for valuing the remaining half of outstanding derivatives claims. The so called "big bank" derivatives counterparties represent 48 percent of all remaining derivatives claims in the U.S. bankruptcy process.[28] While roughly half of the derivatives claims have been settled post-bankruptcy, the estate notes that its derivatives claims framework was propelled by the fact that its big bank counterparties represent 85 percent of unresolved trades (and only five percent of contracts remaining).[29] That figure is not surprising as the vast majority of derivatives trading occurs between large financial institutions. [Ask Larry why they decided to tackle big bank claims "last" since presumably the bulk of the trades are rates.]

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25 Lehman Brothers Holdings Inc. State of the Estate (September 22, 2010), 10.

26 [Insert cite from their plan]. McLaughlin, David and Linda Sandler, "Lehman's $61B Plan Has Carrot, Stick for Paulson-Calpers," Bloomberg (January 26, 2011).

27 See www.lehmancreditors.com for a copy of the liquidation plan.

28 Lehman Brothers Holdings Inc. Plan Status Report (January 13, 2011), 16.

29 *Ibid.*, 16.

Citing the time and costs involved in settling the remaining derivatives claims, Lehman Brothers asserted in January 2011 that it would develop "consistent, transparent, derivative valuation rules".[30] Under the 1992 ISDA Master Agreement, the most common agreement between Lehman Brothers and its derivatives counterparties, the non-defaulting party can value the derivatives transactions by obtaining market quotations from dealers or it can reasonably determine in good faith its total losses and costs associated with the terminated derivatives transactions. Dealers historically favored the latter method, loss, as the selected mechanism, although note that these two elections were scrapped in the 2002 ISDA Master Agreement when a single method, close-out-amount, blended aspects of both. Under the 2002 agreement, the non-defaulting party could consider market quotations from dealers or other providers, but it could also utilize quotes and data for valuing like transactions from internal sources.

Although the details of the derivatives settlement framework have not yet been released publicly by the administrator, the principal challenge that the derivatives settlement framework proposal creates is that the contractual rights the parties bargained for at the outset of the trading relationship will be subjugated to whatever valuation mechanic the Lehman estate develops and the bankruptcy court approves. The Lehman Brothers' plan inserts itself as the (defaulting) sole party making the termination amount determination, arguing that it is well-placed to ensure that its methodology avoids exaggerated and self-serving claims made by non-defaulting parties. In essence, Lehman Brothers is arguing that its counterparties' variance in the interpretation of the contractual methodology for the value of the terminated transactions is adding to the time and costs involved in settling the derivatives portfolio, and that rather than continue to negotiate each derivatives portfolio with its counterparties, it should be able to substitute a new methodology, post-contract and post-bankruptcy, instead. As a general matter, courts are reluctant to interfere with the parties' contract unless certain circumstances such as mistake, duress or other factors are present.

The administrator has released a few general statements on the framework, including that the remaining derivatives contracts would be valued at mid-market at the end of a specified termination date, such as September 15, 2008. This approach will likely be contested by some derivatives counterparties who will argue that significant intra-day fluctuations occurred on the Monday the parent company filed for bankruptcy and that the ISDA Master Agreement explicitly permits the non-defaulting party to select an early termination date within 20 days after the termination notice has been received by the defaulting party. While details of the component transactions representing Lehman Brothers' derivatives portfolio are not public, based on data that the Office of the Comptroller of the Currency ("OCC") and the Bank for International Settlements ("BIS") publish, one could reasonably assume that its derivatives portfolio resembled the portfolios of most other major derivatives players, with two-thirds or more of the portfolio being foreign exchange and interest rate derivatives and credit derivatives being ten percent or less of the portfolio. Lehman Brothers estimates that $40 billion of derivatives claims remain, so on the basis of this writer's assumption, $26 billion of the remaining derivatives claims are likely foreign exchange and interest rate derivatives. This composition of Lehman Brothers' derivatives portfolio may mean that if the bulk of the outstanding transactions are interest rate swaps, the most ubiquitous derivative, the selection of one point in time for the valuation of that transaction type may be problematic. Interest rate swaps, for example, are not typically closed out at the same time on the same day as trades may be booked in different jurisdictions and therefore time zones. For example, the BIS triennial survey reported that for all interest rate and foreign exchange derivatives, 70 percent of trading occurs with counterparties outside the

30 Lehman Brothers Holdings Inc. Plan Status Report (January 13, 2011), 17.

United States.[31] This aspect of the market may make it more challenging for the administrator to argue that it is fair to select one point in time to value the terminated transactions. Conversely, it may be that the credit derivatives markets have a greater percentage of trading done within a jurisdiction, but no reliable figures can be cited for this statement.

In addition, the derivatives settlement framework proposes to reduce the number of maturity "buckets" used for aggregating and offsetting exposures and to have Lehman Brothers determine the bid-ask spread that is typically applied by the non-defaulting party. To date, when a derivatives portfolio is being terminated, the components of that portfolio are divided into buckets organized by maturity of the individual transaction type. The non-defaulting party can then net those exposures. A bid-offer adjustment is often made to the netted exposure amount – a cost to the defaulting party and one that represents uncollateralized risk. The challenge in closing out transactions in the volatile markets of September and October 2008 meant that more bid-offers were included in the non-defaulting parties' close-out prices and fewer exposures were netted. The administrator's post-contract reduction of the number of maturity buckets means that the bid-offer adjustment will be retroactively reduced, thereby significantly impacting the value of the terminated transactions. Thus, while spreads on normally liquid transactions, such as interest rate swaps, increased in the aftermath of Lehman Brothers' bankruptcy, the administrator wants to impose a more narrow and uniform approach that will minimize the valuations produced by those volatile markets.

Lastly, an inconsistency in the approach the estate has taken to date to resolve half of its derivatives claims, arguably following the fiduciary requirements imposed on an administrator, will now see settlement of the other half of its derivatives claims follow an entirely different methodology and approach. Will the administrator be able to persuade the bankruptcy court that its execution of its fiduciary duty treated all derivatives counterparties fairly given the different approaches? Some of LBSF's largest derivatives counterparties, including Bank of America Merrill Lynch, which has $4.8 billion in claims, BNP Paribas, Credit Suisse and J.P. Morgan Chase, have already been reported to oppose the proposed derivatives settlement framework.[32] Lehman Brothers has not submitted a motion to the bankruptcy court yet to approve the framework, as it attempts to negotiate these issues with its big bank derivatives counterparties.

III. Would Dodd-Frank Have Changed the Settlement of Lehman Brothers' Derivatives Portfolio?

Ben Bernanke, Chairman of the Board of Governors of the Federal Reserve System, and Timothy Geithner, Secretary of the U.S. Treasury, perhaps more than most of their predecessors, were policy mavens well-suited in many respects for the roles economic history thrust upon them. After all, Chairman Bernanke was steeped in the arcane details of the Great Depression while Secretary Geithner spent 13 years at the U.S. Treasury in the 1980s and 1990s, followed by over five years at the Federal Reserve Bank of New York, tenures marked by currency crises and a large hedge fund failure, among other events.[33] These two gentlemen were instrumental in crafting proposals for how the financial regulatory framework should be modified, focusing, in part, on the "opaque" nature of derivatives and connecting derivatives to bankruptcy. For

31 "The Foreign Exchange and Interest Rate Derivatives Markets: Turnover in the United States," (April 2010), Federal Reserve Bank of New York, 9-10. Note that this survey is coordinated by the BIS with 53 central banks in April of every third year.

32 Cameron, Matt, "LBHI Administrators Push for Settlement of Derivatives Claims," Risk (March 2, 2011).

33 Skeel, David. The New Financial Deal [insert details].

example, on April 20, 2010, U.S. Treasury Secretary Geithner testified that: "The market turmoil following Lehman's bankruptcy was in part attributable to uncertainty surrounding the exposure of Lehman's derivatives counterparties."[34] Secretary Geithner added that "In this regard, Lehman's bankruptcy highlights another flaw in our financial infrastructure: the opacity and complexity of the OTC derivatives markets. These products grew exponentially in the run-up to the crisis. The notional amount of outstanding credit default swaps grew from about $2 trillion in 2002 to over $60 trillion at year-end 2007. Because these trades are conducted on a bilateral basis, the market has very little visibility into the magnitude of derivatives exposures between firms."[35]

Economists such as John Taylor have already pointed out that the market turmoil following Lehman Brothers' bankruptcy was more likely connected with Secretary Geithner's unveiling of the Troubled Assets Relief Program and the $85 billion government bail-out of AIG rather than the failure of Lehman Brothers and uncertainty about derivatives counterparty exposure.[36] Moreover, policymakers likely conflated or failed to appreciate the distinctions in the principal causes of failure of AIG (unhedged, non-collateralized credit derivatives trading), Bear Stearns (failure to sustain liquidity as a result of its reliance on the overnight repo market) and Lehman Brothers (poor risk management of its real estate portfolio and over-reliance on overnight financing), thereby leading to policy conclusions that perhaps are unsupported by the complex reality of why those firms and others failed. Rather, policymakers focused on two objectives: first, preventing or mitigating systemic risk when a major derivatives participant fails and second, granting regulators new resolution authority to prevent the government from bailing out the failing or failed firm. Policymakers accomplished these two objectives by first crafting legislation in Title VII of Dodd-Frank that attempts to manage counterparty risk by mandatory clearing of certain derivatives through a central counterparty and the consequent imposition of more uniform derivatives collateralization, and second, by introducing resolution authority in Title II of Dodd-Frank to address failed systemically important entities with, among other businesses, a derivatives portfolio. Title VII is inextricably linked to Title II as the former aims to prevent or to mitigate failure in the first place as it relates to derivatives, in part by enhancing information available to regulators, while the latter has broad power available to regulators to take action to resolve a failed institution when such institution is deemed capable of introducing systemic risk.

Title VII – Derivatives Reform Through Clearing and Collateralization

Title VII of Dodd-Frank requires that all eligible derivatives be cleared on a central clearinghouse, known colloquially as a "central counterparty" or "CCP". Currently, a bilateral over-the-counter or OTC derivatives contract is executed between two parties. The terms of that transaction and the amount of collateral posted in association with that trade are private. When a transaction is centrally cleared, however, this single transaction between a buyer and a seller is replaced with two transactions, each involving a third party, the central counterparty. In other

34 Testimony of U.S. Treasury Secretary Timothy Geithner, before the Committee on Financial Services, U.S. House of Representatives, April 20, 2010.

35 *Ibid.*

36 Taylor, John. [Include proper cite.]

words, the central counterparty is the buyer to every seller and the seller to every buyer, in essence, standing between the buyer and the seller.

Clearinghouses perform a valuable function in their mitigation of counterparty risk. In order to do this, the financial resources of a clearinghouse must understandably be robust. The Commodity Futures Trading Commission ("CFTC") proposed on October 1, 2010 that a clearinghouse must maintain financial resources to meet its members' obligations notwithstanding the default of one or possibly two of its members with the largest exposures.[37] The CFTC also proposed that quarterly stress tests should be conducted to determine the amount of resources required. Given that Bank of America, Citibank and J.P. Morgan are the three largest derivatives counterparties in the United States, the simultaneous collapse of two of those institutions could mean the termination of a $146.81 trillion notional derivatives portfolio – representing 25 percent of global notional derivatives value as compared to Lehman Brothers' estimated five percent.[38] The International Monetary Fund has published two papers that estimate that under-collateralization of derivatives relative to risks in the financial system may be $2 trillion.[39] The TABB Group estimates that near-term collateral requirements of moving interest rate and credit derivative transactions to a clearinghouse model will require an additional $240 billion in collateral.[40] Query whether the clearinghouses collectively will be able to address the magnitude of those figures through reserve funds and required collateral posting.

Policymakers were right to focus on collateralization as a risk mitigation technique, as it is critical to the risk management of derivatives, both cleared and uncleared. However, collateralization of derivatives transactions has existed for nearly twenty years, so the posting of collateral to mitigate exposure is not new. Over time, the amount of collateralized derivatives exposure has increased as derivatives trading volume has increased. In 2000, there were estimated to be 12,000 ISDA Credit Support Annexes, the principal document for derivatives collateralization, in place.[41] By the end of 2009, the International Swaps and Derivatives Association ("ISDA") annual Margin Survey indicated that there were 171,879 collateral agreements in place, with 92 percent of those agreements being the ISDA Credit Support Annex.[42]

Before the economic crisis began, perhaps at the end of 2006, ISDA reported in its annual Margin Survey that the gross amount of collateral in use was $1.335 trillion, with 59 percent of mark-to-market credit exposure covered by collateral.[43] Note that the largest firms, including the

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37 Commodity Futures and Trading Commission [insert cite to October 1, 2010 proposal].

38 OCC's Quarterly Report on Bank Trading and Derivatives Activities Fourth Quarter 2010, Table 2.

39 [Insert Singh and Aitken papers from 2009 and 2010.]

40 Rowady, Jr., E. Paul, "The Global Risk Transfer Market: Developments in OTC and Exchange Traded Derivatives," The TABB Group (November 2010), 6.

41 ISDA's 2000 Collateral Survey, 1.

42 ISDA's 2010 Margin Survey, 1.

largest U.S. commercial banks, held 80 percent of all collateral.[44] By the end of the fourth quarter of 2010, the OCC reported that banks held collateral against 93 percent of their exposure to banks and securities firms, and 246 percent against their exposure to hedge funds.[45] The latter figure is high because it is market practice for banks to require the provision of upfront or initial margin from hedge funds in addition to securing any current credit exposure.

Collateralization by product area varies, but the overall amount of collateralization is very high (and has remained so for the last several years). For example, the fifteen largest reporting firms in ISDA's annual Margin Survey in 2010 reported that an average of 97 percent of credit derivatives trades were collateralized, whereas among the total of 89 firms responding to the survey, that figure was 93 percent. Interest rate derivatives at the fifteen largest reporting firms are collateralized at 84 percent, whereas among the total of 90 firms reporting to the survey, that figure was 79 percent.[46]

The type of collateral is important as well. Cash has long been the preferred form of collateral. At the end of 2006, for example, nearly 80 percent of collateral was cash, with U.S. Dollars being 46 percent of the cash pool and the Euro representing 28.8 percent.[47] By the fourth quarter of 2010, the OCC reported that approximately 81 percent of the collateral held by U.S. banks was in the form of cash (50.5 percent in U.S. Dollars and 30.5 percent in other liquid currencies like the Euro), while the ISDA figures, covering the U.S., Europe and Asia, reported 82 percent of collateral globally was in the form of cash, with 42.1 percent being in U.S. Dollars and 31.5 percent being in Euro.[48] U.S. Treasuries as collateral represented 2.0 percent and equity securities represented 1.2 percent in the OCC's Report, while ISDA's annual Margin Survey in 2010 reported U.S. government securities as comprising 4.5 percent of the global collateral pool and European Union member-state government securities representing 5.7 percent.[49] While policymakers focused on the lack of collateralization of AIG Financial Products' derivatives trading, surely these figures show that that was an outlier based on its profile then as a subsidiary of a AAA-rated entity. In addition, there was so little collateral provided that was in the form of something other than cash or Treasury securities that it does not even make an appearance on

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43 ISDA's 2007 Margin Survey, 4. The ISDA Margin Survey covers U.S. and non-U.S. market participants. In 2007, for example, 25 percent of respondents were based in the United States, while 52 percent were based in Europe or South Africa. The OCC Quarterly Reports, by contrast, only cover U.S. national banking associations.

44 *Ibid.*

45 OCC's Quarterly Report on Bank Trading and Derivatives Activities Fourth Quarter 2010, 8.

46 *Ibid.,* 10.

47 ISDA's 2007 Margin Survey, 6.

48 OCC's Quarterly Report on Bank Trading and Derivatives Activities Fourth Quarter 2010, 8. ISDA Margin Survey 2010, 6. Note that the FDIC published an article in April 2011entitled "The Orderly Liquidation of Lehman Brothers Holdings Inc. Under Dodd-Frank,"in the FDIC Quarterly (volume 5, no. 2) wherein the authors state on page 6 that collateral, especially lightly traded collateral, can exacerbate losses when there is a counterparty default. However, as the OCC and ISDA reports show, the vast majority of collateral is in the form of cash.

49 *Ibid.*

either ISDA's or the OCC's surveys. In other words, the industry was collateralizing as part of its derivatives risk management program for close to two decades without needing Congress to tell it to do so.

What has shifted under Dodd-Frank is that the CCP's calculation of required collateral is substituted for the individual counterparty assessing its risks. As is done today, both initial and variation margin will be required. Counterparties to cleared swaps will be required to post initial collateral to the CCP based on the CCP's assessment of the risk profile of that transaction.[50] In addition, each day the CCP will set the variation margin associated with each transaction by recalculating the value of transaction and accordingly calling for or releasing collateral, ensuring that counterparties have neutral risk positions in relation to the value of the underlying asset. In other words, the goal is that every day the CCP receives margin payments from counterparties whose contracts moved against them to ensure that the CCP, or those that participate through the CCP, always have funds to satisfy their obligations under contracts.

The posting of collateral is tied to how the derivatives transactions of a clearinghouse member that has become insolvent are handled. For example, LCH.Clearnet Limited's draft contract states that upon the default of a clearing member, the clearinghouse may close out and terminate the cleared transactions and will not transfer such positions. [CME Clearing and ICE Trust, on the other hand, allow cleared transactions and associated collateral to be transferred to another clearinghouse member.] In addition, the treatment of a counterparty's collateral is important. The CFTC requested comments in November 2010 on various collateral protection models, such as the individual segregation of each customer's collateral at the futures commission merchant, derivatives clearing organization and custodian levels; the commingling of collateral of multiple customers, but in which the value of each customer's collateral is treated on an individual basis; the use of collateral of non-defaulting customers in the default of a clearing member; and the commingling of collateral of a futures commission merchant's customers.

Were Lehman Brothers to have been a clearing member of one of the U.S. clearinghouses, it is anticipated that upon its insolvency, its $35 trillion notional derivatives portfolio (and associated collateral) would have been ported to other clearinghouse members. The concern in a marketplace where other major participants such as Bank of America, Citibank and Morgan Stanley, among others, were under attack means that portability of Lehman Brothers derivatives portfolio may not have allayed counterparty risk to the non-defaulting party population because arguably an equally unstable counterparty was receiving those transactions or a stronger clearing member may have rejected the transactions being proposed for transfer without some sort of government backstop for the unknowable counterparty risk being assumed.

In addition, there are challenges associated with a clearinghouse's approach to collateral calculations. Currently, in the over-the-counter derivatives market, a counterparty's collateral

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50 As it relates to uncleared swaps, Dodd-Frank requires swap dealers and major swap participants to notify their uncleared swap counterparties of their right to segregate their initial margin with an independent third-party custodian. The CFTC's November 2010 proposal would require that the custodian be independent of both the counterparty and the swap dealer or major swap participant and that there be a written custody agreement between the counterparties and the custodian. ISDA's annual Margin Survey in 2010 reported at page 8 that only nine percent of collateral is segregated with a custodian.

requirements are assessed based on its aggregate exposure across all products. For example, a hedge fund that had exposure to a particular security through its prime brokerage account could have its collateral requirements offset through a derivatives transaction. Central clearing, however, will make this cross-margining more difficult. Positions associated with different products are unlikely to be assessed margin in this more holistic manner, thereby resulting in end users posting more collateral in aggregate than currently. It would be worth understanding whether those entities required to post more collateral than at present are the same entities that present the most systemic risk.

Titles I and II of Dodd-Frank and the Resolution of Systemically Significant Financial Companies

A regulatory triumvirate chorused for greater powers to resolve failing or failed financial companies and non-bank financial companies in the wake of Lehman Brothers' bankruptcy. As Chairman Bernanke's statement in the Introduction makes clear, it was his view that the U.S. Bankruptcy Code in 2008 did not protect the public's strong interest in ensuring the orderly resolution of Lehman Brothers, and that that failure resulted in substantial consequences to the financial system and to the economy. Sheila Bair, Chairwoman of the Federal Deposit Insurance Corporation (the "FDIC"), testified that "Failing non-bank financial companies …could only be resolved under the Bankruptcy Code, further exacerbating the financial crisis."[51] And the U.S. Treasury Department's website currently boasts that financial reform will "end 'too big to fail' and taxpayer-funded bailouts, so that average Americans will no longer have to pay the price for greed and irresponsibility on Wall Street."[52] While those statements may carry a certain political appeal, it is this author's view that Dodd-Frank does not significantly alter how a complex derivatives portfolio like Lehman Brothers' would be handled, even with the enhanced resolution authority granted to regulators, nor does the legislation provide comfort that the U.S. government would not bail out a clearinghouse were it to default.

To put the resolution authority of Dodd-Frank into context, it is helpful to understand the definitional corrals of its Titles I and II. Title I of Dodd-Frank established the Financial Stability Oversight Council (the "Council"). The Council, comprised of various financial markets regulators and chaired by the Secretary of the Treasury, has a dual mission: first, to identify risks and to respond to emerging threats to the financial stability of the United States and its financial system; and second, to promote market discipline by eliminating the concept of "too big to fail". The Council is thus tasked with designating "significant bank holding companies" and "significant nonbank financial companies" that will be subject to enhanced supervision by the Federal Reserve Board. "Significant bank holding companies" are proposed to be those entities with at least $50 billion in total consolidated assets and are automatically considered systemically important. "Significant nonbank financial companies" are those designated as systemically important by the Council. Thus, it is possible that a "significant nonbank financial company" is not necessarily systemically important.[53]

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51 Testimony of Sheila C. Bair, Chairwoman of the Federal Deposit Insurance Corporation, to the Financial Crisis Inquiry Commission, (September 2, 2010), 1.

52 See www.treasury.gov/initiatives/wsr/Pages/wall-street-reform.aspx (March 17, 2011).

53 The FDIC stated that some Lehman entities may not have been systemically important and thus would have been subject to the Bankruptcy Code. It would then be possible that one Lehman Brothers entity would be subject to

Once systemic importance designations are made, entities that are failing or have failed are taken out of the usual insolvency laws that would have applied to its various corporate entities and instead, the Federal receivership or resolution authority of the FDIC comes into play through Title II of Dodd-Frank. Title II allows for the orderly liquidation of these "financial companies". Title II's definition of "financial company" captures four general categories of entities: bank holding companies, as defined in Section 2(a) of the Bank Holding Company Act of 1956[54]; nonbank financial companies (which includes, as noted above, nonbank financial companies that the Council has determined must be supervised by the Federal Reserve Board); subsidiaries of entities included within one of the first two categories; and brokers and dealers. The fact that an entity is a financial company is not enough for the Federal receivership provisions of Title II to apply, however. To be eligible for the resolution authority to apply, the financial company must be a "covered financial company". At the risk of further definitional contortions, a "covered financial company" is a financial company as to which a systemic risk determination has been made by the relevant set of regulators.[55] In other words, if Title I of Dodd-Frank allows an entity to be deemed systemically important, then if such entity is failing or has failed, the Federal receivership provisions of Title II will apply.

Procedurally, Title I requires the Secretary of the Treasury or the FDIC and the Board of Governors of the Federal Reserve System (or the SEC in the case of brokers or dealers or the Federal Insurance Office for insurance companies)[56] to present a written recommendation stating whether a particular covered financial company presents systemic risk. At least two-thirds of the then–serving members of the Board of Governors and the board of directors of the FDIC (or parallel agency) must approve the petition of systemic risk designation. The relevant regulators must prepare a written analysis of whether the covered financial company is in "default or danger of default". "Default or danger of default" is intentionally broad in its definition, covering circumstances such as a bankruptcy case that has been or likely will be commenced; the financial company incurring losses that will or are likely to deplete all or substantially all of its capital; the assets of the financial company being less than, or likely to be less than, its obligations to creditors; or the financial company is, or is likely to be, unable to pay its obligations in the ordinary course of business.[57] The repetition of the phrase "likely to" gives the relevant regulator the ability to take action before a covered financial company actually files for bankruptcy. The written analysis must also set forth the effect that the bankruptcy of the covered financial company would have on the financial stability of the United States, evaluate whether any private sector alternatives to prevent the insolvency exist, assess whether or not a bankruptcy

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Title II, while another would not. See "Orderly Liquidation of Lehman Brothers Holdings Inc. Under Dodd-Frank," FDIC Quarterly, volume 5, no. 2 (April 2011), 13.

54 12 U.S.C. § 1841(a). See also Section 102(a)(1) of Dodd-Frank.

55 The FDIC and the Board of Governors of the Federal Reserve System determine whether the Federal receivership provisions will apply to a financial company, and the SEC and the Board of Governors of the Federal Reserve System make such determination for covered brokers or dealers.

56 Section 203(a)(2) of Dodd-Frank.

57 Section 203(c)(4) of Dodd-Frank.

case is appropriate for the covered financial company and evaluate the effect of a Federal receivership on creditors, counterparties and shareholders of the covered financial company, as well as other market participants.[58] Once this analysis is submitted, the Secretary of the Treasury, in consultation with the President of the United States, must appoint the FDIC as the receiver for the covered financial company if the Secretary determines that in fact the covered financial company is in default or in danger of default, that its default would have a serious adverse effect on the financial stability of the United States, that no private sector alternative is available to prevent the insolvency, the effect of the Federal receivership on the claims of creditors, counterparties and shareholders is beneficial and lastly, that an orderly liquidation would avoid or mitigate adverse effects.[59]

In the case of Lehman Brothers, it seems almost obvious in hindsight that the Council would have deemed the investment bank to be systemically important as a nonbank financial company and therefore subject to enhanced supervision by the Federal Reserve Board and, possibly, the resolution authority provided for under Title II. The encyclopedic Examiner's Report, issued in March 2010, provides extensive details regarding the doubtful solvency of Lehman Brothers. Using Dodd-Frank's directive to regulators to consider whether the nonbank financial company was in default or in danger of default, the balance sheet assessment was one obvious avenue of inquiry, but perhaps of greater importance than capital to an investment bank was its access to liquidity. The "unreasonably small capital" test, relied upon by bankruptcy courts to avoid pre-petition transfers, is a helpful tool because the test takes a broader view of risks, like liquidity, that are not necessarily reflected through the more traditional balance sheet assessment.[60] As the Examiner's Report notes, the unreasonably small capital test had two components: first, was it reasonably foreseeable that Lehman Brothers was at risk of losing access to financing that it required to operate its business and to satisfy its obligations as they became due; and second, whether Lehman Brothers' liquidity stress tests were reasonably constructed.[61] The SEC and the Federal Reserve Bank of New York's performance as it related to the evaluation of the strength of Lehman Brothers following the failure of Bear Stearns in March 2008 would not be immediately reassuring. Given that Bear Stearns had collapsed in a matter of days when its liquidity sources dried up, Lehman Brothers met almost immediately with the two regulators to discuss the results of its own liquidity stress tests, in essence examining scenarios for declining funding. In its May 28, 2008 stress test report, for example, Lehman Brothers reported to its regulators that it survived the stress tests by a margin of over $10 billion.[62] It took the Federal Reserve Bank of New York over two months after Bear Stearns' failure to develop and conduct its own stress test and scenario analysis, which concluded that Lehman Brothers would fail in a "Bear Stearns" type run on the bank by $84 billion.[63] Moreover, the SEC failed to recognize or

58 Section 203(a)(2) of Dodd-Frank.

59 Section 203(b) of Dodd-Frank.

60 Report of Anton R. Valukas, Examiner, to the U.S. Bankr. Ct. (March 11, 2010), 1643.

61 *Ibid.*, 1649.

62 *Ibid.*, 1679.

63 *Ibid.*, 1680.

enforce Lehman Brothers' requirement to be able to monetize its liquidity pool within 24 hours, as Lehman Brother relied instead on a five day test.[64] Lastly, the derivatives business conducted by LBSF indicated that at May 31, 2008 and August 31, 2008, it held 0.41 percent and 0.44 percent, respectively, in terms of its ratio of equity to assets, characterized as borderline solvent.[65] Under Dodd-Frank, perhaps these types of strands of analysis would have led the regulators to conclude that Lehman Brothers was in danger of collapsing.

While the enhanced supervision powers designated by Title I should provide regulators with greater information about the largest and most complex entities, if one of those entities actually begins to demonstrate weakness or fails, then the Secretary of the Treasury will likely be working diligently to conclude a private sector solution (which will be challenging, particularly during a volatile market like that experienced in the fall of 2008). Further, the Secretary of the Treasury will be obligated to assess whether the Bankruptcy Code provides an appropriate framework in which to resolve the failed non-bank entity. These requirements in Dodd-Frank result in virtually no change in the bodies of insolvency laws that would apply to the financial company, either because the failing financial company or key parts of it are absorbed by an acquiring company or the failed company's insolvency is handled, in part, under the U.S. Bankruptcy Code and/or the Federal Deposit Insurance Act. The application of the Bankruptcy Code and the Federal Deposit Insurance Act presumably means that no bail out of the failing company occurs, thereby inadvertently solving the "too big to fail" problem at least as it relates to bank holding companies, banks and certain non-bank financial companies.

As it relates to derivatives specifically, many of today's largest counterparties execute their derivatives transactions through their U.S. commercial bank. Banks have historically been excluded from the U.S. Bankruptcy Code[66], and instead bank insolvencies were addressed under the Federal Deposit Insurance Act. Despite the underlying policy rationale that derivatives were responsible, at least in part, for the economic crisis and the creation of systemic risk, the insolvency of a derivatives counterparty, which happens to be a bank, was largely un-addressed by Dodd-Frank.

Banks dominate as derivatives counterparties. The OCC's quarterly report on U.S. banks' derivatives activity noted in its most recent report that the five largest U.S. commercial banks represent 96 percent of the total banking industry notional amount of derivatives trading activity.[67] The concentration of a small number of financial institutions in the derivatives market has not shifted much in many years, including prior to Lehman Brothers' bankruptcy.[68] The vast

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64 *Ibid.*, 1507, 1508.

65 *Ibid.*, 1618, 1621.

66 11 U.S.C. § 109(b)(2).

67 OCC's Quarterly Report on Bank Trading and Derivatives Activities Fourth Quarter 2010, 1.

68 In the OCC's Quarterly Report on Bank Trading and Derivatives Activities First Quarter of 2008, the five largest commercial banks represented 97 percent of the total banking industry notional amount of derivatives trading activity. In order by notional, those institutions were JP Morgan Chase Bank, Bank of America, Citibank, Wachovia Bank and HSBC Bank USA. In the OCC's Quarterly Report on Bank Trading and Derivatives Activities Fourth Quarter 2010, the five largest commercial banks in order by notional were JP Morgan Chase Bank, Citibank, Bank

majority of this derivatives trading activity is focused on interest rate swaps: in the OCC's First Quarter Report in 2008, that figure was 79 percent whereas in the OCC's Fourth Quarter Report in 2010, it was 84 percent. Interest rate swaps are perhaps the least complicated derivative instrument, particularly as compared to the challenges historically associated with credit derivatives in terms of credit event triggers and settlement, the complex calculations and dependencies of equity derivatives and the inherent volatility of commodity derivatives, so presumably there is less risk in trading interest rate swaps than other derivatives.[69] In addition, the OCC reports that 61 percent of the top five commercial banks' net current credit exposure is to other banks and securities firms, with corporates representing 33 percent, and hedge funds, the most overly collateralized group as noted above, being a mere one percent of net credit exposure.[70]

Thus, our financial landscape is dominated by the world's largest banks, who in turn are among the world's largest derivatives counterparties, and yet while these banks will be more closely regulated under Title I of Dodd-Frank, the way in which their insolvency under Title II would be handled would likely differ very little from the pre-Dodd-Frank environment. If the resolution authority granted under Title II does not apply, then the Federal Deposit Insurance Act applies to the largest bank derivatives counterparties. If the resolution authority granted under Title II does apply, then its effect is largely a mirror of the existing Federal Deposit Insurance Act provisions – provisions that commercial banks are already subject to in the event of insolvency.

Nonbank financial companies, just as with banks, are also captured by the definition of "covered financial companies" under Dodd-Frank. Nonbank financial companies are defined as those "predominantly engaged in financial activities".[71] This phrase was already embedded in Section 4(k) of the Bank Holding Company Act of 1956 and Regulation Y.[72] The Federal Reserve Board issued a proposal to refine this phrase on February 8, 2011, stating that "predominantly engaged in financial activities" should be measured either by a revenue or an asset test. Specifically, it was proposed that "predominantly engaged in financial activities" means the entity either has consolidated annual gross financial revenues in either of its two most recently completed fiscal years of 85 percent or more of the company's consolidated annual gross revenues or its consolidated total financial assets as of the end of either of its two most recently completed fiscal years is 85 percent or more of the company's consolidated total assets. Financial revenue or financial assets are those derived from or related to activities that are "financial in nature" or the

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of America, Goldman Sachs Bank USA and Wells Fargo Bank. In addition, the number of insured U.S. commercial banks engaged in derivatives trading has remained relatively stable: at the end of the first quarter of 2008 there were 1,003 banks (at 7 of 2008 Report), whereas at the end of the fourth quarter of 2010, there were 1,070 (at 1 of 2010 Report).

69 OCC's Quarterly Report on Bank Trading and Derivatives Activities Fourth Quarter 2010, 11. Credit derivatives represent 6.1 percent of the OTC notional amounts for U.S. commercial banks, while equity derivatives are 0.6 percent and commodity derivatives are 0.5 percent. Note that these figures shift slightly when considering the data collected by the Bank for International Settlements as greater numbers of institutions are covered.

70 *Ibid.*, 8.

71 Section 102(a)(4)(A)(ii)of Dodd-Frank.

72 [Insert reference.]

ownership, control or activities of an insured depository institution or any subsidiary of such institution. "Financial in nature" ties back to Section 4(k) of the Bank Holding Company Act and includes activities such as securities underwriting, dealing and market-making and engaging in financial and investment advisory activities. The definition would not include activities that are incidental or complementary to financial activities, such as trading in physical commodities. In other words, companies that are not predominantly engaged in "financial activities" cannot be designated as systemically important. Under Dodd-Frank, LBSF and Lehman Brothers, each as nonbank financial companies, likely would be captured as covered financial companies subject to Title I's heightened regulatory scrutiny.

As it relates to Title II being applied to a nonbank financial company such as LBSF, the treatment of derivatives would remain largely unchanged from the application of the Bankruptcy Code pre-Dodd-Frank. Non-defaulting counterparties under Section 210(c)(8) of Dodd-Frank remain able to terminate, close-out and liquidate their derivatives contracts upon the insolvency of a nonbank financial company such as LBSF (or its parent) with the application of a one day stay[73] – the same approach already applicable to banks under the Federal Deposit Insurance Act. There are a handful of differences, though, such as the Bankruptcy Code's accommodation of a rapid sale of the failing business (such as with the sale of Lehman Brothers' broker-dealer business to Barclays coincident with Lehman Brothers' bankruptcy), as compared to the FDIC's ability under Dodd-Frank to establish a "bridge financial company" to succeed to selected assets and liabilities of the covered financial company (or covered broker or dealer). This would give the failing company time to negotiate its sale to another company or to seek other types of resolution of its failing status.

The largest failures of entities due to mis-management of derivatives to date have not involved any U.S. banks but rather entities that are non-banks. Some of the more spectacular derivatives-related failures include the municipality of Orange County in 1994, which lost 1.7 billion of the county's $7.4 billion investment portfolio, the hedge fund Long-Term Capital Management's loss of $4.6 billion in 1998 and AIG Financial Products, a dealer and subsidiary of AIG that operated with a $2 trillion derivatives portfolio, which is continuing to be unwound. Orange County would not have been captured by Title II given the unique legal treatment of municipalities. Perhaps Long-Term Capital Management would not have attracted regulators' attention in a 2011 landscape of thousands of hedge funds, as compared to 1998, and thus not deemed worthy of being liquidated under Title II of Dodd-Frank. AIG Financial Products would have been most obvious to have been deemed systemically important and therefore subject to Title I's enhanced regulatory supervision. If AIG had been allowed to file for bankruptcy, the winding up of its derivatives portfolio in AIG Financial Products would have proceeded under the U.S. Bankruptcy Code much as it currently has. If AIG Financial Products had been subject to Federal receivership under Title II of Dodd-Frank, then the derivatives portfolio would have been unwound in much the same fashion.

While it is possible that the resolution authority of Title II will in practice be of little to no effect for unwinding the derivatives portfolios of covered financial companies, the clearinghouses present an entirely different risk profile. The legislative mandate of Dodd-Frank to clear certain

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73 Section 210(c)(10)(B)(i)(l) of Dodd-Frank.

yet-to-be specified derivative transactions has guaranteed that the largest global financial behemoths will concentrate risk at the central clearinghouses they each trade and clear through, and as noted above, collateral may be set too low to prevent a systemic effect if one or two clearing members or significant customers default. In fact, the Basel Committee on Banking Supervision proposed in December 2010 that the largest global banks hold additional capital against the risk that a clearinghouse defaults.[74] At the time of this paper, many of the regulations relating to the risk management and operational aspects of the clearinghouses and swap execution facilities have yet to be released by the regulators, and the clearinghouses continue to refine their collateral calculations and documentation with the clearing members.

Currently, the largest commercial banks are the clearing members of the leading clearinghouses, partly as a result of the significant financial resource requirements specified by each exchange. For example, ICE Trust U.S., owned by Intercontinental Exchange Inc., is a limited purpose trust company that serves as a central clearing facility for credit default swaps. Ice Trust U.S. requires that its 14 clearing members, including four of the five largest U.S. commercial bank derivatives participants, have $5 billion in capital.[75] The CME Group, which clears credit derivatives and interest rate swaps, has 10 and 12 clearing members for those respective products – again, with the largest U.S. commercial banks being clearing members.[76]

Section 804 of Dodd-Frank provides the Council with the authority to designate a financial market utility such as a clearinghouse as systemically important. As the Notice of Proposed Rulemaking in February 2011 stated, clearinghouses' interconnectedness concentrates a significant amount of risk in the market, and their payment and settlement processes are highly interdependent.[77] If the Council designated a particular clearinghouse as systemically important, then that clearinghouse would be subject to the liquidation provisions of Title VII. The Notice on Proposed Rulemaking attracted only twelve comment letters, ranging from a law firm to a trade association to Visa, but the comments were largely common to one another. In essence, these groups felt that in order to be systemically important, the type of market served by the clearinghouse, the nature and size of its counterparties and the complexity and liquidity of the products should be considered in making the determination. In addition, the level of interdependence, whether the clearinghouse had the potential to create significant liquidity disruptions or dislocations in the event of failure or whether the clearinghouse had the potential to create large credit or liquidity exposures relative to participants' financial capacity were also common themes.

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74 Bank for International Settlements, [insert cite].

75 Rules of ICE Trust U.S. LLC, Section 201(b)(ii).

76 The CFTC proposed in February 2011 that clearinghouses open membership to companies with at least $50 million in capital. While a vibrant and competitive market is critical in virtually all cases, the potential catastrophe that could befell clearing members if one member were to default would be staggering. Smaller firms would simply not be able to contribute, as required under current clearinghouse rules, to the guarantee and default pools of reserves in the same way that the larger financial institutions can.

77 12 C.F.R. Part 1320.

The Council issued its response in February 2011, incorporating many of the recommendations included in the comment letters. The Council determined that there are four statutory considerations for the systemically important designation as it relates to financial market utilities ("utilities") such as clearinghouses.[78] First, the number and value of transactions processed, cleared or settled by the utility would be assessed. Second, the aggregate credit and liquidity exposures to counterparties would be considered. For example, the mean daily and historical peak aggregate intraday credit provided to participants, as well as the value of the margin held would be assessed In addition, an evaluation of the estimated peak liquidity required in the case of the default of the largest single participant. Third, the interdependencies and other interactions with other utilities or payment, clearing or settlement activities would be examined. Lastly, the Council would consider the effect that the failure of or disruption to the utility would have on critical markets, financial institutions or the broader system. Under these criteria, the CME Group, ICE Trust U.S. LLC ("ICE Trust") and LCH.Clearnet would be included, but it remains to be seen whether there will be other clearinghouses or other utilities that can be added to this list.

As noted above, the clearinghouses have yet to finalize their collateral formulations and their documentation for clients of clearing members. However, the rules of the leading clearinghouses have been published. In many respects, the Rules resemble those of the well-understood ISDA standards, in fact with ISDA membership being required.[79] The key difference of course is that unlike a privately negotiated derivative contract, cleared derivatives will have documentation that is truly standardized and therefore not capable of being modified by clients of clearing members.

There has been much industry thought given to how the default of a clearing member (or even the default of a client of a clearing member) will be handled, and waterfalls or priorities of payments are being finalized for the various clearinghouses. Sections 605 and Section 611 of ICE Trust's Rules provide that when a clearing member defaults, meaning that it or its guarantor has failed to meet its obligations or it has failed to transfer requested collateral, the clearinghouse is permitted to terminate, liquidate accelerate and close-out the client's "open positions". Section 805 of ICE Trust's Rules codify that bankruptcy and the failure to pay or deliver with respect to open positions or the guaranty fund are the only defaults applicable to ICE Trust.

Upon the default of a clearing member, ICE Trust's Rules provide that it shall determine the loss incurred and the amount of collateral that can be liquidated. Once the "Closing-out Process" has commenced, ICE Trust has three business days to decide whether it will replace all or part of the transactions of the defaulting clearing member by porting or transferring those transactions to other clearing members that will agree to accept their transfer. The client of the clearing member can decide (prior to default) to designate certain clearing members are acceptable parties to whom their cleared trades can be transferred in the event of a default.[80]

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78 *Ibid.*

79 Rules of ICE Trust U.S. LLC, Section 201(b)(viii).

80 *Ibid.*, Section 20A-02.

Thus, if ICE Trust or another clearinghouse were designated as systemically important and thus subject to Title II's resolution authority, the termination of the defaulting party's derivatives transactions would in essence be transferred to another clearing member, with ICE Trust effecting such transfer within three business days. Collateral would be transferred along with the open derivatives position. If ICE Trust or another clearinghouse were not considered systemically important, then the bankruptcy of such clearinghouse would depend upon the entity's organizational form and location.

The Automatic Stay under Dodd-Frank

Under the U.S. Bankruptcy Code and the Federal Deposit Insurance Act, counterparties to certain derivatives are generally permitted to enforce default and termination provisions in those contracts upon the insolvency of their counterparty. While the Bankruptcy Code does not impose a timeframe for exercising those rights, the Federal Deposit Insurance Act allows such rights to be enforced after a one day stay. In addition to those rights, the debtor's counterparties may also liquidate collateral that has been posted by the debtor. Any shortfall resulting thereafter will constitute unsecured claims against the bankruptcy estate, entitling creditors to share in any distribution.

Within weeks of Lehman Brothers' bankruptcy filing, Harvey Miller, the bankruptcy doyen tasked with the filing, testified that a "massive destruction of value" could have been averted if an automatic stay had been in place for derivatives contracts.[81] Derivatives counterparties' exemption from application of the automatic stay, which has been embedded in the U.S. Bankruptcy Code since 1978 for an expanding class of products, was actually designed to achieve the opposite of what Mr. Miller asserted – the mitigation of systemic risk arising from cascading bankruptcies of other entities. By providing a safe harbor from the stay for these contracts, the delays assumed to be inherent in the bankruptcy process would be avoided and counterparties could reduce the losses that would otherwise result from the degradation of collateral pledged by the debtor.[82] Dodd-Frank did not alter this accommodation to derivatives. Rather, it continued with the thirty-two year statutory approach of allowing derivative contracts to be exempt from the automatic stay of action that applies to all other creditors. Dodd-Frank thus followed the Federal Deposit Insurance Act in settling on a one business day stay.[83]

The arguments for and against the safe harbor for derivatives from the application of the stay have been sufficiently covered in academic literature. Once more in the legislative litany, Dodd-Frank re-affirmed the special treatment afforded to derivatives contracts. To this author, the most salient factor in the debate has always been whether the safe harbor for derivatives manages to mitigate systemic risk. While derivatives certainly lived up to their famous moniker as weapons of mass destruction in the view of the media and many policymakers, the fact remains that derivative transactions were terminated quickly and efficiently, although obviously settlement of claims and the ensuing fiduciary requirements of administration certainly slow the process, no major counterparties slid into bankruptcy, parties were eventually able to re-hedge their positions

81 Testimony of Harvey Miller, before the Committee on the Judiciary, Subcommittee on Commercial and Administrative Law, U.S. House of Representatives, October 22, 2009, 3.

82 The President's Working Group on Financial Markets, "Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management," April 1999, 20.

83 Section ___ of Dodd-Frank.

and quality collateral was fairly ubiquitous both before and after the meltdown in 2008. While the period of the stay was debated in the negotiations that led to Dodd-Frank, it is this author's view that the imposition of a one business day stay is likely ineffective in terms of stabilizing the financial system, and barely provides the FDIC with enough time to identify an appropriate entity or entities to which the failed entity's derivatives portfolio could be transferred. What would be effective in mitigating systemic risk, however, is ensuring an expanse of time pre-default for a failing financial company to novate transactions or to establish a bridge bank for those transactions. In the post-Dodd-Frank world, the regulators on the Council cannot claim that inadequate powers will stymie their risk management efforts. The enhancements achieved in Title I of Dodd-Frank should ensure that Title II never comes into operation, and the application of a stay under resolution authority is thus superfluous.

Conclusion

For all the hullabaloo about derivatives, their treatment in bankruptcy hardly changed under Dodd-Frank. Moreover, the experience of Lehman Brothers from a derivatives perspective demonstrates how quickly and effectively transactions can be terminated and how well a defaulting party post-bankruptcy can manage and significantly increase the size of its estate. Certainly the way in which these products will trade has been significantly altered under Dodd-Frank and these legislative refinements should lessen some of the risks presented by these products, most notably counterparty risk.

The practical reality, however, is that the greater the inter-dependence of our financial systems and the participants within those systems, the more likely that periods of instability will result. The challenge market participants and regulators will always face is minimizing the systemic effects of bouts of instability and preventing disruption in an overnetworked environment.[84] Dodd-Frank, while having little practical effect on how the largest derivatives counterparties will be treated in bankruptcy, hopefully achieves its potential through more effective and well-timed regulatory oversight. As Professor L.C.B. Gower once commented, the regulation and supervision of financial companies should not seek to achieve the impossible task of protecting fools from their own folly, but should be no greater than is necessary to protect reasonable people from being made fools of.[85]

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84 See Overconnected: The Promise and Threat of the Internet by Dr. William H. Davidow (2011). With his background in electrical engineering and his decades of experience as a Silicon Valley executive and successful venture capitalist, Dr. Davidow offers an engaging read on the perils of being over-connected and how to minimize systemic disruptions.

85 [Insert cite.]