

AN EVALUATION OF THE U.S. REGULATORY RESPONSE TO SYSTEMIC RISK AND FAILURE POSED BY DERIVATIVES

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Derivatives, understood by few but disparaged by many, are often blamed for the collapse of the United States economy in the wake of Lehman Brothers' bankruptcy in September 2008.¹ A legislative response to the crisis was inescapable and on July 21, 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act)² was signed into U.S. law. While the Dodd-Frank Act addresses many aspects of the financial markets, this Article will focus on Titles II and VII in order to examine how transacting in derivatives has changed in the aftermath of this legislation and to assess how the bankruptcy of a systemically important financial institution engaged in derivative transactions will be approached.

A Bid to Limit Systemic Risk and Failure

The Dodd-Frank Act has two primary objectives that relate to derivatives: first, to limit the systemic risk of modern finance, in part by changing the locus of trading in derivatives and the conduct of derivatives market participants; second, to limit the damage caused by the failure of a systemically important financial institution.³ With respect to the

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¹ On April 20, 2010, U.S. Treasury Secretary Timothy Geithner testified to the House of Representatives Financial Services Committee that "the market turmoil following Lehman's bankruptcy was in part attributable to uncertainty surrounding the exposure of Lehman's derivatives counterparties." *See Treasury Secretary Tim Geithner Written Testimony before the House Financial Services Committee*, U.S. DEPT. TREASURY, (Apr. 20, 2010) <http://www.treasury.gov/press-center/press-releases/Pages/tg645.aspx>.

² Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

³ *See id* at 1376.

first objective, the Dodd-Frank Act's principal strategy required that certain derivatives be "cleared." With respect to the second objective, the Dodd-Frank Act singled out the entities most likely to cause systemic problems if they failed and subjected them to a new bankruptcy process. This Article will focus on the second objective of the Dodd-Frank Act and in particular on how the failure of a systematically important financial institution would relate to the treatment of derivatives.

Reducing Systemic Risk

The estimated \$632 trillion notional over-the-counter derivatives market⁴ is in the early transformational stage of where and how such transactions are executed. Title VII of the Dodd-Frank Act requires that all eligible derivatives be cleared through a central clearinghouse, known colloquially as a "central counterparty" or "CCP." Unlike an over-the-counter derivative transaction where each of the two parties face the risk that its counterparty might fail to perform its obligations, a cleared derivative transaction mitigates this risk of performance failure by having a third party, the CCP, stand between the two parties and absorb that risk.⁵

Two years after the passage of the Dodd-Frank Act, the Commodity Futures Trading Commission (CFTC) proposed that certain credit default swaps and interest rate swaps be cleared. The CFTC's decision to focus initially on these two products was a function of their importance in the market and the fact that a significant percentage of those swaps were already being cleared. End users of derivatives, such as corporations, are not, however, required to clear swaps if such entities can demonstrate that the swap is being used to hedge or to mitigate commercial risk, the CFTC (or the Securities and Exchange Commission (SEC)) was notified as to how the end user generally meets the financial obligations associated with entering into uncleared swaps, and the entity's Board of Directors approved such an approach.

Clearinghouses perform a valuable function in their mitigation of counterparty risk. To sustain this function, the clearinghouse's financial resources must be sufficiently robust to meet its members' obligations notwithstanding the default of one of its members. Given that J.P. Morgan Chase Bank, Citibank, Goldman Sachs Bank USA, and Bank of America are the four largest derivative counterparties in the United States, the collapse of any one of those institutions could mean the termination of anywhere between a \$42.67 and \$71.28 trillion notional derivatives portfolio—roughly seven to eleven percent of global notional derivatives value.⁶ In addition to the financial resources marshaled by each clearinghouse, another critical component of the clearing model is the provision

⁴ BANK FOR INT'L SETTLEMENTS, *Quarterly Review*, Table 19, (June 2013), <http://www.bis.org/statistics/dt1920a.pdf>. Notional, of course, does not reference the amount that is at risk and does not account for the effect of netting and the provision of collateral.

⁵ See Dodd-Frank Act §723(h) at 1676.

⁶ See OFFICE OF THE COMPTROLLER OF THE CURRENCY, *Quarterly Report on Bank Trading and Derivatives Activities, Second Quarter 2013* (2013) available at <http://www.occ.gov/topics/capital-markets/financial-markets/trading/derivatives/dq213.pdf>.

requiring collateral. The requirement that the parties post collateral every day underpins the purported safety of the clearing model.

Policymakers were correct to focus on collateralization as a risk-mitigation technique. The collateralization of over-the-counter derivative transactions has existed for twenty years, so the posting of collateral for cleared and uncleared transactions to mitigate exposure is not new. Before the economic crisis began, the International Swaps and Derivatives Association (ISDA) reported in its 2006 Margin Survey that the gross amount of collateral in use for over-the-counter derivative transactions was \$1.335 trillion, with fifty-nine percent of mark-to-market credit exposure covered by collateral.⁷ Today, large dealers reported that eighty percent of over-the-counter derivatives are subject to collateral arrangements, with ninety-six percent of credit derivatives exposure being collateralized.⁸ The type of collateral is important as well. Cash has long been the preferred form of collateral. At the end of 2006, nearly eighty percent of collateral was cash, mostly provided in U.S. dollars, and nearly seven years later, similar percentage is true today.⁹

What shifted under the Dodd-Frank Act is that the CCP's calculation of required collateral is substituted for the individual counterparty's assessment of its risks. Counterparties to cleared swaps will be required to post initial (or upfront) collateral to the CCP based on the CCP's assessment of the risk profile of that transaction.¹⁰ In addition, each day the CCP will set the variation margin associated with each transaction by recalculating the value of the 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 the CCP receives margin payments every day from counterparties whose contracts moved against them to ensure that the CCP and those that participate through the CCP always have funds to satisfy their obligations under contracts.

The posting of collateral is closely related to how the derivative transactions of an insolvent clearinghouse member are handled. For example, LCH. Clearnet Group's contract and related rules state that upon a clearing member's default, the clearinghouse may close out and terminate the cleared transactions and will not transfer such positions. CME

⁷ INT'L SWAPS AND DERIVATIVES ASS'N, *ISDA Margin Survey 2007*, 4, (Apr. 15, 2007) available at <http://www2.isda.org/functional-areas/research/surveys/margin-surveys/>. The ISDA Margin Survey covers U.S. and non-U.S. market participants. In 2007, for example, twenty-five percent of respondents were based in the United States, while fifty-two percent were based in Europe or South Africa. The OCC Quarterly Reports, by contrast, only cover U.S. national banking associations. *Id.*

⁸ INTERNATIONAL SWAPS AND DERIVATIVES ASSOCIATION, *ISDA Margin Survey 2013*, 2, (Jun. 21, 2013) available at <http://www2.isda.org/functional-areas/research/surveys/margin-surveys/>.

⁹ See *id.* at 9; INTERNATIONAL SWAPS AND DERIVATIVES ASSOCIATION, *ISDA Margin Survey 2006*, 4, (Apr. 15, 2006), available at <http://www2.isda.org/functional-areas/research/surveys/margin-surveys/>.

¹⁰ As it relates to uncleared swaps, the Dodd-Frank Act 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. See Protection of Cleared Swaps Customer Contracts and Collateral; Conforming Amendments to the Commodity Broker Bankruptcy Provisions, 77 Fed. Reg. 6336-01 (Feb. 7, 2012).

Clearing and ICE Trust, by contrast, allow cleared transactions and associated collateral to be transferred to another consenting clearinghouse member.¹¹ Had Lehman Brothers been a clearing member of CME Clearing, for example, upon its insolvency its \$35 trillion notional derivatives portfolio (and associated collateral) would have been ported to another clearinghouse member. The concern in a marketplace where major participants such as Bank of America, Citibank and Morgan Stanley, among others¹² were vulnerable at that same time means that the 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. Alternatively, 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.

Albeit one of the Dodd-Frank Act's goals was to reduce systemic risk through clearing and collateralization of derivatives, little has changed in terms of how collateralization operates both before and after Lehman Brothers' bankruptcy. A clearinghouse will determine the collateral required for cleared trades while for over-the-counter derivatives, the counterparties will agree to the extent of such collateralization. As the OCC Quarterly Reports demonstrate, there have actually been very limited counterparty credit losses incurred from over-the-counter derivatives trading activity by U.S. banks. At the end of June 30, 2013, eighteen U.S. banks (out of 1,400) reported a total of \$61 million in charge-offs of over-the-counter derivatives exposures, down from \$84 million in the first quarter of 2013.¹³ Net current credit exposure or the netted amounts of contracts with positive values against those with negative values was reported as \$339 billion at the end of the second quarter of 2013—a figure that peaked at \$800 billion at the end of 2008.¹⁴ These figures reflect the importance of collateralization and netting in the over-the-counter context and indicate that a very small fraction of the gross notional outstanding of derivatives held at U.S. banks is subject to net current credit exposure. Even with these high collateralization rates in place, at least as reported by U.S. banks, it should be noted that no consensus has formed as to whether there is sufficient collateral in place to mitigate counterparty loss. Researchers at the International Monetary Fund estimated that under-collateralization of derivatives relative to risks in the financial system may be \$2 trillion.¹⁵ The TABB Group contended that interest rate and credit derivative transactions'

¹¹ See *CME Clearing Financial Safeguards*, CME GROUP, (2012), <http://www.cmegroup.com/clearing/files/financialsafeguards.pdf>.

¹² Federal Reserve chairman Ben Bernanke testified to the U.S. Financial Crisis Inquiry Commission: "If you look at the firms that came under pressure in that period . . . out of . . . thirteen of the most important financial institutions in the United States, twelve were at risk of failure within a period of a week or two." See Thomas Russo and Aaron J. Katzel, *The 2008 Financial Crisis and Its Aftermath: Addressing the Next Debt Challenge*, GROUP OF THIRTY 7, 11 (2011).

¹³ See *Quarterly Report on Bank Trading and Derivatives Activities, Second Quarter 2013*, *supra* note 6 at 8.

¹⁴ *Id.* at 6.

¹⁵ Manmohan Singh and James Aitken, *Counterparty Risk, Impact on Collateral Flows and Roles for*

migration to a clearinghouse would require an additional \$240 billion in collateral.¹⁶

Dealing with Failure

If the Dodd-Frank Act's first objective was to limit risk *before* an institution collapses, the second objective was to limit destruction *after* a systemically important financial institution has failed or is in danger of failing. To accomplish this second objective, the Dodd-Frank Act introduced a new framework in Title II to facilitate the "orderly liquidation" of systemically important financial institutions.¹⁷ The population of systemically important financial institutions includes bank holding companies that have at least \$50 billion in assets and nonbank financial institutions such as investment banks or insurance holding companies that the new Financial Stability Oversight Council (Council) deems to be systemically important.¹⁸ At present, there are eight U.S. banks deemed systemically important, along with three Japanese banks, seventeen European banks, and one Chinese bank. Before the Title II orderly liquidation authority procedures apply, however, it must be demonstrated that the use of the U.S. Bankruptcy Code would not be appropriate in the resolution of the institution without the destabilization of the U.S. financial system or a resort to a taxpayer bailout being likely.

It seems certain that all systemically important financial institutions will transact in derivatives and those transactions are more likely today than in 2008 to be booked with a U.S. commercial bank. U.S. banks dominate as derivatives counterparties. The most recent OCC Quarterly Report on Bank Trading and Derivatives Trading reported that out of the 1,400 U.S. banks engaged in derivatives trading, four U.S. commercial banks hold ninety-three percent of that exposure.¹⁹ 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.²⁰ The vast majority of this derivatives trading activity

Central Counterparties, (International Monetary Fund, Working Paper 09/173, 2009).

¹⁶ E. Paul Rowady Jr., *The Global Risk Transfer Market: Developments in OTC and Exchange Traded Derivatives*, TABB GROUP, 6 (November 2010), <http://www.world-exchanges.org/files/statistics/pdf/V08-030%20Global%20Risk%20Transfer%20Market.pdf>.

¹⁷ See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, §204, 123 Stat. 1376 1454 (2010).

¹⁸ Title II is not limited to financial companies already designated as "systemically important" but can apply to any potentially failing entity the Council determines is systemically important and "in default or in danger of default."

¹⁹ *Quarterly Report on Bank Trading and Derivatives Activities, Second Quarter 2013*, *supra* note 6, at Graph 4.

²⁰ In the OCC Quarterly Report on Bank Trading and Derivatives Activities, First Quarter 2008, the five largest commercial banks represented ninety-seven percent of the total banking industry notional amount of derivatives trading activity. In order by notional, those institutions were JPMorgan Chase Bank, Bank of America, Citibank, Wachovia Bank, and HSBC Bank USA. In the OCC Quarterly Report on Bank Trading and Derivatives Activities, Second Quarter 2013, Table 1, the five largest commercial banks in order by notional were JPMorgan Chase Bank, Citibank, Goldman Sachs Bank USA, Bank of America and HSBC Bank USA. The number of insured U.S. commercial banks engaged in derivatives trading has increased: at the end of the first quarter of 2008 there were 1,003 banks, *see* OFFICE OF THE

focuses on interest rate swaps: in the OCC's First Quarter Report in 2008, that figure was seventy-nine percent, whereas in the OCC's Second Quarter Report in 2013, it was eighty-one percent.²¹ 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. In addition, the OCC reports that fifty-nine percent of the top four commercial banks' net current credit exposure is to other banks and securities firms, with corporates representing thirty-two percent and hedge funds, the most overly collateralized group at 325 percent, being two percent of net credit exposure.²²

Thus, our financial landscape is dominated by the world's largest banks, which in turn are among the world's largest derivatives counterparties. While these banks will be more closely regulated under Title I of the Dodd-Frank Act, the way in which their insolvency will be handled has shifted.

Banks have historically been excluded from application of the U.S. Bankruptcy Code²³ and instead bank insolvencies were addressed under the Federal Deposit Insurance Act (FDIA). The FDIA provides that the Federal Deposit Insurance Corporation (FDIC) may operate as a conservator to preserve the value of a failing bank and return it to financial health or the FDIC may operate as a receiver in order to liquidate a failed bank.²⁴ Unlike a proceeding under the U.S. Bankruptcy Code, an FDIC receivership or conservatorship is not subject to direct supervision by the courts.²⁵ In large part, this policy choice was designed to ensure that bank failures were not subjected to the assumed-to-be lengthy proceedings under Chapter 11 of the U.S. Bankruptcy Code and placed more discretion with the FDIC to act expeditiously.

Under an FDIC regime, upon bankruptcy the FDIC has limited repudiation and avoidance powers with respect to derivatives. For example, regardless of whether the FDIC is acting as a conservator or a receiver, it must either disaffirm or repudiate all or none of the qualified financial contracts (derivatives) between the failed bank and the same counterparty, together with associated credit support or collateral.²⁶ In addition, the

COMPTROLLER OF THE CURRENCY, *Quarterly Report on Bank Trading and Derivatives Activities, First Quarter 2008*, 7, (2008) available at <http://www.occ.gov/topics/capital-markets/financial-markets/trading/derivatives/dq108.pdf>, whereas at the end of the second quarter of 2013, there were 1,400. See *Quarterly Report on Bank Trading and Derivatives Activities, Second Quarter 2013*, *supra* note 6.

²¹ See *Quarterly Report on Bank Trading and Derivatives Activities, Second Quarter 2013*, *supra* note 6, at 1; *Quarterly Report on Bank Trading and Derivatives Activities, First Quarter 2008*, *supra* note 20, at 1.

²² See *id.* at 7.

²³ See 11 U.S.C. § 109(b)(2) (2010).

²⁴ See 12 U.S.C. § 1821(c)(1) (2013).

²⁵ See § 1821(c)(6).

²⁶ See § 1821(e)(1)-(3).

FDIC has the right to transfer qualified financial contracts to creditworthy bridge depository institutions.²⁷ If the FDIC is acting as receiver, it must provide notice of the transfer by 5:00 p.m. EST on the business day after its appointment as receiver.²⁸ At that time, the counterparty to the failed bank may elect to terminate the qualified financial contract (that is, the non-defaulting counterparty to the failed bank could follow the termination and close-out provisions in Section 6 of the ISDA Master Agreement for derivative transactions). If the FDIC is acting as conservator, there is no time limit on its right to transfer qualified financial contracts and the counterparty may not terminate the qualified financial contracts unless the conservator defaults to a degree that would permit termination under applicable non-insolvency law.²⁹

From available reports, it appears that in every recent case where a large U.S. bank has become subject to a receivership proceeding, all qualified financial contracts and associated collateral of the failed bank were transferred in their entirety to a single bridge bank or third party acquirer. When the assets of Washington Mutual Bank, the largest U.S. bank failure to date, were sold in September 2008 to J.P. Morgan Chase, the FDIC transferred to J.P. Morgan Chase all qualified financial contracts to which Washington Mutual Bank was a party. While that process seemed to go well, Washington Mutual was not exactly a powerhouse derivatives market participant. Thus, it is not known whether the FDIC is resourced effectively to be able to handle a systemically important financial institution's bankruptcy, a clearinghouse's bankruptcy or multiple simultaneous bankruptcies. To date, the FDIC has fortunately not had the opportunity to deal with a derivatives portfolio approaching anything even near the size of Lehman Brothers' derivatives portfolio—and Lehman Brothers was not as significant a derivatives market participant as the four largest U.S. commercial banks that trade derivatives.

While it is impossible to know whether the FDIC could effectively administer the bankruptcy of a systemically important financial institution, it is known that Title II's orderly liquidation authority shifts away from the legal certainty of the bankruptcy processes under the U.S. Bankruptcy Code by permitting the FDIC to engage in ad hoc interventions under Title II. In addition, Title II allows the FDIC to discriminate among similarly situated secured creditors in a bankruptcy. Under Section 506(a)(1) of the U.S. Bankruptcy Code, a creditor's secured status is determined when the collateral securing the claim is sold or when the Chapter 11 plan is judicially confirmed.³⁰ In contrast, under the regulations implementing the Dodd-Frank Act, the collateral securing the debt of the covered financial company is valued as of the date of the receiver's appointment.³¹ If the FDIC is unable to find a third party to purchase the collateral, the FDIC may transfer that collateral to a bridge financial company that the FDIC has organized.³² While the bankruptcy

²⁷ See § 1821(e)(9), (10)(C).

²⁸ See § 1821(10)(B)(i)(I).

²⁹ See § 1821(10)(B)(ii).

³⁰ See 11 U.S.C. §506(a)(1) (2005).

³¹ See 12 C.F.R. § 380.1-380.53 (2011).

³² See 12 U.S.C. §5390(h)(1) (2010).

process under the U.S. Bankruptcy Code mandates that the use or sale of the debtor's property can only occur after there has been due notice and hearing, thereby ensuring the highest price is paid for such assets, Title II allows the FDIC to be on both sides of the transaction and to determine the consideration paid for the assets, with no court or creditor oversight.

The deficiencies of Title II resulted in the development of a proposed new U.S. Bankruptcy Code Chapter 14.³³ Chapter 14 offers two distinct approaches: either a conventional reorganization or a two entity recapitalization of a holding company. Under the Dodd-Frank Act, the FDIC focused on a two entity recapitalization, with a systemically important financial institution's holding company being recapitalized through the transfer of its assets and liabilities to a new bridge financial company, and this bridge financial company in turn dealing with its operating subsidiaries. By contrast, Chapter 14 provides that if a motion is approved for the transfer of assets and liabilities in the first forty-eight hours of a bankruptcy, then the systemically important financial institution's operations and ownership of subsidiaries shifts to a new bridge company that is *not* in bankruptcy. Qualified financial contracts such as derivatives would be kept intact and transferred to the bridge company. Through the transfer, the new bridge company will be effectively recapitalized by leaving the long-term unsecured debt behind in the bankruptcy proceeding.

Conclusion

It was a foregone conclusion that policymakers would respond to the economic crisis in the aftermath of Lehman Brothers' bankruptcy and the near-collapse of other financial institutions. While it is arguable that the effort to prevent systemic risk through the mandate of clearing derivatives is a useful step, it is not a prophylactic. It remains entirely possible that a clearinghouse itself is capable of failure, as several have failed in the past, and the concentration of derivatives trading in the largest global financial institutions has exacerbated this possibility. Certainly, having the clearinghouse as the counterparty mitigates counterparty credit risk, but there may be costs involved if we have simply migrated to a more focused nucleus of systemically important financial institutions that could possibly fail. In addition, addressing the potential or eventual failure of a systemically important financial institution could have been addressed in a more judicially sound manner than the ad hoc approach policymakers chose to burden the FDIC with. There are attractive features of Title II, such as coordination with foreign regulators, but not at the expense of due process and judicial review. While the markets have already moved to accommodate the clearing of mandated derivative transaction types, it is hoped that efforts can be made to revise Title II as it relates to how the failure of a systemically important financial institution is handled.

³³ The Hoover Institution established a Resolution Project Working Group in 2009 (of which this author is a member) to develop an alternative approach to bankruptcy and related issues.