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BACKGROUNDER

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Fixing the Regulatory Framework for Derivatives

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Abstract

The mere mention of derivatives is usually enough to end any rational discussion of financial regulation. Though many policymakers have strong opinions on the apparent dangers of derivatives, there is no objective economic reason to regulate derivatives as a unique product. Yet, Dodd–Frank took exactly that approach, leaving financial markets with a higher concentration of financial risks and a complex set of rules filled with special exemptions. Worse, Dodd–Frank did essentially nothing to address the main problem with the existing regulatory framework: Derivatives users receive special exemptions from core bankruptcy provisions. The current bankruptcy code was enacted in 1978, and Congress has steadily expanded special exemptions (safe harbors) for derivatives and repurchase agreements (repos), as well as other financial contracts. These safe harbors were typically justified as necessary to mitigate systemic risk, but the 2008 crisis showed that these arguments are deeply flawed. To improve the regulatory framework for derivatives, Congress should remove all bankruptcy safe harbors for derivatives and repos, and repeal Title VII of Dodd–Frank.

Many policymakers have strong opinions on the risks of derivatives, but there is no objective economic reason to regulate derivatives as a unique product. To the contrary, it is best to avoid regulating derivatives as a unique product because doing so is bound to result in a complex set of rules filled with special exemptions for select users. Prior to the 2008 financial crisis, derivatives were not regulated as a unique product. Instead, most derivatives—including credit default swaps (CDSs) and other over the counter (OTC)

Key Points

- There is no objective economic reason to regulate derivatives or repurchase agreements (repos) as unique products. Financial institutions can best account for the risk of these instruments within their existing regulatory capital frameworks.
- The main problem with the regulatory structure for derivatives and repos pre-2008 was that these financial instruments had special exemptions (safe harbors) from core provisions of the bankruptcy code.
- These safe harbors were justified mainly on the grounds that they would mitigate systemic risk. The 2008 crisis showed that safe harbors worsen, rather than mitigate, systemic risk.
- Systemic concerns cannot justify blanket exemptions from core bankruptcy provisions. Providing safe harbors only to systemically important firms would blatantly provide special financial protection to a small group of financial firms.
- Eliminating all safe harbors for repos and derivatives would cause counterparties to account for more risk, an outcome which should be applauded.

This paper, in its entirety, can be found at **http://report.heritage.org/bg3156**

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derivatives—were regulated based on who used them and, necessarily, for what purpose. Banks, for instance, were required to account for their derivative exposure within their existing regulatory capital framework, just as they were required to account for loans, repurchase agreements (repos), and other financial risks.

The main problem with the pre-crisis regulatory structure for derivatives and repos was that the bankruptcy code included special exemptions (safe harbors) for derivatives and repos. These safe harbors from core bankruptcy provisions distorted financial markets leading up to the 2008 crisis because they gave derivative and repo users preferred positions relative to other types of creditors. The safe harbors were justified on the grounds that they would prevent systemic financial problems, a theory that proved false in 2008. Nonetheless, the 2010 Dodd–Frank Wall Street Reform and Consumer Protection Act largely ignored these harmful provisions in the bankruptcy code, and implemented a new regulatory framework that regulates OTC derivatives as a unique product. Removing these safe harbors and eliminating the Dodd–Frank framework would improve capital markets by properly incentivizing market participants to account for their financial risks.

Overview of Derivatives Markets

Derivatives securities are essentially contracts between buyers and sellers (commonly referred to as counterparties), but there are many different types of derivatives. Broadly speaking, these typically long-lived contracts bind the counterparties to buy or sell some asset at a future date at a certain price. The value of the contract—the derivative itself—is therefore tied to some underlying asset, such as a corporate bond. In general, the counterparties buy and sell these contracts so that they can lower their exposure to uncertain future price movements.[1] While there is no doubt that some investors use derivatives for purely speculative purposes, the primary use of derivatives is to reduce financial risk.

Three of the more common types of derivatives are futures, forwards, and swaps. Futures are derivatives contracts used so commonly that they are standardized financial instruments, a feature that allows them to trade on exchanges, much like stocks.[2] The Chicago Mercantile Exchange, for instance, provides a market where counterparties can buy and sell standardized futures contracts on commodities, such as butter, lumber, cattle, foreign currencies, and even stock market indices. Forwards, on the other hand, are most often specialized contracts between two financial firms or between a financial firm and its customer. Internationally active corporations regularly enter into forward contracts to hedge against losing money on future changes in exchange rates.[3]

Whereas futures contracts typically do not require the physical delivery of an asset at maturity, forward contracts normally do require delivery. Swaps are similar to forward contracts but they require counterparties to make a *series* of future payments, whereas forward contracts require only one future payment. Swap contracts can, therefore, be viewed as a series of forward contracts. The most commonly used swaps are those that hedge against interest-rate risk, but market participants use many different types of swap contracts.[4] Historically, most swaps have been negotiated directly (bilaterally) between large banks and other institutional investors—such as insurance companies, pension funds, and mutual funds—on the OTC market rather than purchased on exchanges. Standardized financial instruments typically trade on exchanges, whereas nonstandard financial products, such as highly customized CDSs, tend to trade in OTC markets.

Typically, as particular financial products become more widespread, they become more standardized,

1. John Hull, *Options, Futures, and Other Derivatives*, 3rd ed. (Upper Saddle River, NJ: Prentice–Hall, 1997).
2. Ibid. Historically, the exchanges have set the rules and procedures for standardization of futures contracts.
3. Ibid., and Roberta Romano, "A Thumbnail Sketch of Derivative Securities and Their Regulation," *Maryland Law Review*, Vol. 55, No. 1 (1996), http://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=2985&context=fss_papers (accessed June 22, 2015). Also see Bruce Tuckman, "In Defense of Derivatives: From Beer to the Financial Crisis," Cato Institute *Policy Analysis* No. 781, September 29, 2015, http://object.cato.org/sites/cato.org/files/pubs/pdf/pa781.pdf (accessed July 26, 2016).
4. As of June 2013, the International Swaps and Derivatives Association reported that interest-rate swaps accounted for more than 80 percent of the OTC derivatives market. See International Swaps and Derivatives Association, "The Value of Derivatives," 2014, http://www2.isda.org/about-isda (accessed June 22, 2015).

and their trading slowly migrates to exchanges.[5] In terms of overall volume, the OTC market is more than 10 times the size of the exchange-traded derivatives market.[6] Furthermore, while all sorts of nonfinancial companies use OTC derivatives, the bulk of the OTC derivatives market consists of interest-rate and foreign-exchange swaps that are heavily concentrated among commercial banks.[7] Thus, banking regulators have for years been the main regulators of financial risks concerning the bulk of the derivatives market.[8]

Risk and the OTC Derivatives Market

Many commentators have pointed to the enormous *notional* size of the OTC derivatives markets—approximately $700 trillion—as an ominous indicator of the systemic risk that derivatives create.[9] This statistic is misleading for several reasons. To begin, the notional size of the market obscures the fact that derivatives, such as CDSs, improve firms' ability to diversify and reduce their risks. In fact, derivatives securities, such as OTC market CDSs, do not create any new risk. Instead, a CDS merely provides protection to end users by shifting *existing* risks to other firms that are more willing and able to risk their capital. The notional amount of a derivatives contract does not accurately reflect even the amount of capital at risk.

The notional size of an OTC contract merely represents the maximum amount to which a counterparty *could* be exposed, depending on a number of factors.[10] Moreover, firms that sell CDS contracts typically protect their own financial exposure by purchasing separate CDS contracts. JP Morgan, for instance, can buy a CDS contract from Deutsche Bank to protect itself from having to pay on a CDS it sold to American Airlines. Then, Deutsche Bank can buy a new CDS from Goldman Sachs to protect itself from having to pay JP Morgan, and so on. Thus, while instructive at some level, the notional amount does not accurately reflect either the underlying risk or the amount of that risk to which the counterparties are exposed.

A better measure of the risk that OTC-derivative counterparties take on is the amount of *credit risk* they face. Credit risk, in turn, is the risk that a counterparty may be unable to make the payments to which it agreed in the original contract. The Bank for International Settlements (BIS) estimates total credit risk in the OTC derivatives market with a measure called *gross market value*. The BIS reports that as of December 2015, global OTC derivatives markets contained a gross market value of $14.5 trillion based on a notional amount of $493 trillion.[11] Even this measure, however, fails to account for *netting* among counterparties as well as *collateral*, both

5. Darrell Duffie, "Futurization of Swaps," Bloomberg, January 28, 2013, p. 2, http://www.darrellduffie.com/uploads/policy/DuffieBGOV_FuturizationOfSwaps.pdf (accessed July 28, 2015). For more on the OTC markets, see Darrell Duffie, *Dark Markets: Asset Pricing and Information in Over-the-Counter Markets* (Princeton, NJ: Princeton University Press, 2012), pp. 1–9.
6. As of December 2015, globally, there was more than $25 trillion in notional principal outstanding for all exchange-traded futures, and roughly $38 trillion for all exchange-traded options. Historically, these two derivatives make up the bulk of the exchange-traded derivatives market. See Bank of International Settlements, "Exchange-Traded Futures and Options, by Location of Exchange," Table D1, http://www.bis.org/statistics/d1.pdf (accessed July 26, 2016). In contrast, the total notional principal outstanding in the OTC market was nearly $700 trillion as of June 2013. See International Swaps and Derivatives Association, "The Value of Derivatives."
7. The largest five banks account for roughly 95 percent of all swaps among the largest 25 commercial banks. Comptroller of the Currency, "OCC's Quarterly Report on Bank Trading and Derivatives Activities Third Quarter 2012," Table 1, Quarter 3, 2012, http://www.occ.treas.gov/topics/capital-markets/financial-markets/trading/derivatives/dq312.pdf (accessed October 7, 2015). Similar concentration appears globally; see Duffie, "Futurization of Swaps."
8. It is true that OTC swaps were not regulated by either the CFTC or the SEC, but the overwhelming majority of these swaps were regulated by state and federal banking regulators. See Norbert J. Michel, "Fixing the Dodd–Frank Derivatives Mess: Repeal Titles VII and VIII," Heritage Foundation *Backgrounder* No. 3076, November 16, 2015, http://www.heritage.org/research/reports/2015/11/fixing-the-doddfrank-derivatives-mess-repeal-titles-vii-and-viii?ac=1 (accessed July 26, 2016).
9. International Swaps and Derivatives Association, "The Value of Derivatives."
10. Notional amounts for interest-rate swaps, for example, have a very different use and meaning than they have for CDS contracts. Notional amounts for interest-rate swaps are not traded, and the notional size is essentially a hypothetical amount upon which interest-rate payments are based. See International Swaps and Derivatives Association, "Interest Rate Swap Example," 2004, http://www.isda.org/educat/pdf/IRS-Diagram1.pdf (accessed August 17, 2016). Also see Nicholas Vause, "Counterparty Risk and Contract Volumes in the Credit Default Swap Market," *BIS Quarterly Review*, December 2010, p. 61, http://www.bis.org/publ/qtrpdf/r_qt1012g.pdf (accessed September 7, 2015).
11. Bank for International Settlements, "OTC Derivatives Statistics at end-December 2015," May 2016, http://www.bis.org/publ/otc_hy1605.pdf (accessed July 26, 2016).

of which further reduce counterparties' exposure on derivatives contracts.

The process of netting essentially offsets gains and losses so that OTC counterparties cannot simultaneously default on one contract while accepting payment on another—the *net* difference has to be paid (or received).[12] This practice is standard in the International Swaps and Derivatives Association (ISDA) master agreement, and it binds a defaulting counterparty to offset defaulting (negatively valued) contracts with non-defaulting (positively valued) contracts.[13] Many of the large institutional investors in the OTC derivatives market have multiple contracts with each other, so applying netting to the gross market value in the OTC market reduces aggregate credit exposure even further. In 2013, the ISDA estimated that netting reduced credit exposure in OTC derivatives to less than $4 trillion, a large amount, but far less than $700 trillion.[14] Similarly, the Office of the Comptroller of the Currency (OCC) estimates that U.S. commercial banks and savings associations netted more than 90 percent of their derivatives exposure between 2009 and 2012.[15]

Collateral is property that borrowers provide to lenders as a form of protection in case the borrower fails to pay back what is owed, and derivatives counterparties typically use cash or U.S. Treasury securities for collateral. Counterparties typically post collateral (margin) when they initiate a contract, and also may provide additional collateral (variation margin) as market conditions change. The ISDA estimated that accounting for both netting and collateral reduced the credit exposure in OTC derivatives to $1 trillion in 2013.[16] This figure represents less than 0.5 percent of the notional amount outstanding, and the exposure is roughly consistent with data from both 2011 and 2012 as well.[17] Regulators have to consider all of these issues when developing rules for regulating OTC derivatives.[18]

Pre-Dodd–Frank Regulatory Framework for OTC Derivatives

Prior to the 2010 Dodd–Frank Act, OTC swaps were not separately regulated by either the Commodity Futures Trading Commission (CFTC) or the Securities and Exchange Commission (SEC), but the overwhelming majority of these swaps were regulated by state and federal banking regulators.[19] Historically, large banks have always been the heaviest users of interest-rate swaps, the type of swap that

12. Darryll Hendricks, "Netting Agreements and the Credit Exposure of OTC Derivatives Portfolios," Federal Reserve Bank of New York *Quarterly Review* (Spring 1994), http://www.newyorkfed.org/research/quarterly_review/1994v19/v19n1article2.pdf (accessed June 22, 2015).
13. Participants in the OTC derivatives markets have long relied on their private trade association, the ISDA; the ISDA master agreement is the contract under which virtually all OTC derivative transactions take place. See Geoff Chaplin, *Credit Derivatives: Trading, Investing, and Risk Management*, 2nd ed. (United Kingdom: John Wiley and Sons, 2010), pp. 60–61.
14. International Swaps and Derivatives Association, "The Value of Derivatives." See also David Mengle, "The Importance of Close-Out Netting," ISDA *Research Notes*, No. 1, 2010, http://www.isda.org/researchnotes/pdf/Netting-ISDAResearchNotes-1-2010.pdf (accessed June 22, 2015).
15. Ibid., and Comptroller of the Currency, "OCC's Quarterly Report on Bank Trading and Derivatives Activities Third Quarter 2012," Graph 5B.
16. International Swaps and Derivatives Association, "The Value of Derivatives."
17. Some of these individual measures, even after accounting for netting and collateral, can still fail to provide a complete picture of system-wide risk because some OTC derivatives participants rely on a process called clearing, whereby a central counterparty (CCP) assumes the risks of the original counterparties to derivatives contracts. See Chaplin, *Credit Derivatives: Trading, Investing, and Risk Management*, pp. 350–352, and Craig Pirrong, "The Economics of Central Clearing: Theory and Practice," ISDA D*iscussion Papers Series* No. 1, May 2011, http://www2.isda.org/news/isda-publishes-the-economics-of-central-clearing-theory-and-practice-a-discussion-paper-on-clearing-issues (accessed July 26, 2016).
18. Historically, exchange-traded derivatives have been regulated by the exchanges (such as the Chicago Mercantile Exchange and the New York Stock Exchange) on which they trade and the respective regulator of the exchange. In the U.S., these regulatory functions are typically carried out by a self-regulatory organization and either the SEC or the CFTC. See Edward Murphy, "Who Regulates Whom and How? An Overview of U.S. Financial Regulatory Policy for Banking and Securities Markets," Congressional Research Service *Report* 7-5700, January 30, 2015, https://www.fas.org/sgp/crs/misc/R43087.pdf (accessed July 27, 2016). Dodd–Frank altered this framework; it encourages more exchange trading of OTC derivatives and institutes additional regulation for these types of trades. See Michel, "Fixing the Dodd–Frank Derivatives Mess: Repeal Titles VII and VIII."
19. The first federal statute regulating futures, the Grain Futures Act of 1922, was enacted in the wake of declining crop prices after European agricultural production recommenced post World War I. The U.S. Department of Agriculture regulated the futures market until 1974 when, soon after newspaper reporters blamed a steep increase in food prices on speculative trading, Congress created the Commodity Futures Trading Commission (CFTC). See Romano, "A Thumbnail Sketch of Derivative Securities and Their Regulation."

accounts for more than 80 percent of the OTC derivatives market. Thus for the bulk of the OTC derivatives market, it is completely false to say that OTC derivatives were unregulated. Federal banking regulators, including the Federal Reserve and the OCC, constantly monitor banks' financial condition, especially the banks' swaps exposure.[20]

The main method that banking regulators used to regulate banks' swap exposure was to ensure that banks accounted for OTC derivatives when calculating their regulatory capital. Even the very first iteration of the Basel capital requirements, which were implemented in the late 1980s, required banks to account for their swaps when calculating capital ratios. In particular, banks had to hold capital against the *credit-risk equivalent* to their swaps, a method that essentially treated derivatives as a type of loan in banks' risk-adjusted assets.[21] Simply put, none of these derivatives transactions took place outside bank regulators' purview, and there is no shortage of public acknowledgements attesting to this fact. For instance, a 1993 Boston Federal Reserve paper notes that "[b]ank regulators have recognized the credit risk of swaps and instituted capital requirements for them and for other off-balance-sheet activities, as part of the new risk-based capital requirements for banks."[22]

As a result, OTC derivatives were not regulated as a specific product in the way that, for example, gasoline is regulated. Instead, OTC derivatives were regulated on the basis of who used them and, necessarily, for what purpose. If, for example, American Airlines negotiated an OTC derivative contract with Wells Fargo, federal banking regulations would require Wells Fargo to account for that contract within its normal regulatory capital framework. In other words, Wells Fargo was required to account for its OTC derivatives exposure within the same framework it was required to account for loans and other financial risks. Although American Airlines was not regulated by banking regulators, the company had to disclose the financial risks associated with its derivatives contracts based on standards adopted by the Financial Accounting Standards Board (FASB).[23]

Ideally, the regulatory framework for derivatives would focus exclusively on fostering accurate disclosure of relevant information, even by financial companies.[24] However, given that banks—not commercial companies, such as American Airlines—in the pre-Dodd–Frank era were regulated with a risk-based capital framework, the older approach made perfect sense. Then, as now, there was nothing particularly unique about OTC derivatives requiring special product-based regulations for all users. Indeed, it is best to avoid regulating OTC derivatives as a unique product because that type of regulation invites rules that favor certain users over others. Nonetheless, the Dodd–Frank Act imposed product-based regulations on much of the OTC derivatives market.

Title VII of Dodd–Frank imposes a requirement to clear more OTC derivatives through central counterparties (CCPs), and also gives the CFTC and the SEC explicit authority to regulate the OTC swaps markets and market participants.[25] Many commer-

20. See Norbert Michel, "The Myth of Financial Market Deregulation," Heritage Foundation *Backgrounder* No. 3094, April 28, 2016, http://www.heritage.org/research/reports/2016/04/the-myth-of-financial-market-deregulation.
21. Katerina Simons, "Interest Rate Structure and the Credit Risk of Swaps," Federal Reserve Bank of Boston, *New England Economic Review* (July/August 1993), https://www.bostonfed.org/economic/neer/neer1993/neer493b.pdf (accessed June 22, 2015).
22. Ibid. For similar statements from the OCC, see Office of the Comptroller of the Currency, "Credit Derivatives," *OCC Bulletin* 1996-43, August 12, 1996, http://www.occ.gov/news-issuances/bulletins/1996/bulletin-1996-43.html (accessed July 27, 2016), and Comptroller of the Currency Administrator of National Banks, "OCC's Quarterly Report on Bank Derivatives Activities, First Quarter 2006," http://www.occ.gov/topics/capital-markets/financial-markets/derivatives/dq106.pdf (accessed July 27, 2016).
23. Financial Accounting Standards Board, "Summary of Statement No. 133: Accounting for Derivative Instruments and Hedging Activities (Issued 6/98)," http://www.fasb.org/summary/stsum133.shtml (accessed July 27, 2016).
24. Currently, the SEC regulates the activities and capital structures of many nonbank financial firms—such as mutual funds, exchange-traded funds, and closed-end funds— under the Investment Company Act of 1940, as amended, 15 U.S. Code 80a. The SEC recently proposed a rule to "provide an updated and more comprehensive approach to the regulation of funds' use of derivatives." See Securities and Exchange Commission, "Use of Derivatives by Registered Investment Companies and Business Development Companies," Proposed Rule, December 28, 2015, *Federal Register*, Vol. 80, No. 248, pp. 80883–80996, https://www.gpo.gov/fdsys/pkg/FR-2015-12-28/pdf/2015-31704.pdf (accessed August 26, 2016).
25. Section 701, Subtitle A (Regulation of the Over the Counter Swaps Markets), U.S. Code Title 15, Chapter 109, Subchapter I. For more on Dodd-Frank's regulatory approach, see Michel, "Fixing the Dodd-Frank Derivatives Mess: Repeal Titles VII and VIII."

cial users of derivatives have exemptions from the new rules, but banking regulators remain responsible for certifying that banks are meeting their regulatory capital ratios when they use OTC swaps. Title VII did virtually nothing to fix the problems that contributed to the 2008 financial crisis, and the new rules—particularly the clearing mandate—have likely further concentrated financial risks in U.S. markets.

The Dodd–Frank framework is also harmful because it ignores particularly damaging derivatives exemptions in the bankruptcy code. In fact, Dodd–Frank ignores similarly risky bankruptcy provisions for repos.[26] Both derivatives and repos, a type of short-term loan secured with collateral, share special bankruptcy provisions that favor their users relative to other creditors.[27] This special treatment contributed to major market distortions leading up to the 2008 financial crisis because it gave repo and derivatives counterparties preferred positions over other creditors.

Overview of Key Provisions in Bankruptcy

Dodd–Frank took a misguided approach to actively regulating OTC derivatives and, perhaps worse, failed to address special bankruptcy provisions that favor OTC derivative and repo users relative to ordinary creditors. The current bankruptcy code was enacted in 1978, and Congress has steadily expanded safe harbors for derivatives and repos, as well as other financial contracts.[28] A brief overview of the bankruptcy process highlights how this special treatment can distort financial markets by favoring certain counterparties over other creditors.[29]

A firm (the debtor) typically files for bankruptcy protection under Chapter 11 of the U.S. Code, meaning that it seeks protection from creditors who may seek control of the firm's assets because they fear nonpayment. A main goal of this protection is to enable the debtor to remain in business and pay its creditors what they are owed over time. When a Chapter 11 bankruptcy filing begins, the court creates an "estate" that consists of virtually all of the debtor's assets as of the petition date.[30] To ensure that the estate remains a viable business, the bankruptcy filing triggers a provision known as the *automatic stay*, a kind of financial time-out.[31]

The stay remains in effect until a bankruptcy judge—sort of a referee in the process—says otherwise, at which time the debtor and the creditors begin a coordinated effort to resolve the debtor's financial situation equitably across similar creditors. In general, the bankruptcy filing strips creditors of many contractual rights they would normally have. For instance, when the debtor files bankruptcy, the stay

26. A repo agreement is a contract where one party agrees to sell securities for cash and repurchase the same securities later at a higher price (frequently the next day). Thus, a repo is essentially a secured short-term loan: One party borrows cash from another and provides securities for collateral (which are kept in the event of nonpayment). See Norbert J. Michel, "Federal Reserve's Expansion of Repurchase Market Is a Bad Idea," Heritage Foundation *Issue Brief* No. 4261, August 14, 2014, http://www.heritage.org/research/reports/2014/08/federal-reserves-expansion-of-repurchase-market-is-a-bad-idea.

27. For financial disclosure rules on repos and derivatives that apply to nonfinancial companies, see Financial Accounting Standards Board, "Transfers and Servicing (Topic 860): Repurchase-to-Maturity Transactions, Repurchase Financings, and Disclosures," *Accounting Standards Update* No. 2014-11, June 2014, http://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1176164126488&acceptedDisclaimer=true (accessed August 4, 2016), and Financial Accounting Standards Board, "Derivatives and Hedging (Topic 815): Inclusion of the Fed Funds Effective Swap Rate (or Overnight Index Swap Rate) as a Benchmark Interest Rate for Hedge Accounting Purposes," *Accounting Standards Update* No. 2013-10, July 2013, http://www.fasb.org/cs/BlobServer?blobkey=id&blobnocache=true&blobwhere=1175827352325&blobheader=application/pdf&blobcol=urldata&blobtable=MungoBlobs (accessed August 4, 2016). Capital adequacy for banks' repo transactions was included even in the first iteration of the Basel Capital Accords dating to the late 1980s. See Ralph de Haas and Thomas Keijser, "Repo-Style Transactions and Capital Adequacy Requirements Collateral, Capital Adequacy Requirements, and Supervisory Policies," Netherlands Central Bank, *Research Series Supervision Paper* No. 37, 2001, http://www.dnb.nl/binaries/ot037_tcm46-146050.pdf (accessed August 4, 2016), and Peter Rose and Sylvia Hudgins, *Bank Management & Financial Services*, 7th ed. (New York: McGraw–Hill, 2008), pp. 423–495.

28. Mark Roe, "The Derivatives Market's Payment Priorities as Financial Crisis Accelerator," *Stanford Law Review*, Vol. 63 (2011), p. 552. Roe notes that "Congress added derivatives priorities to the Code over the last three decades, expanding them in 1982, 1984, 1994, 2005, and 2006."

29. One of the earliest works to make such an argument was Franklin Edwards and Edward Morrison, "Derivatives and the Bankruptcy Code: Why the Special Treatment?" *Columbia Law and Economics Research Paper* No. 258, August 16, 2004, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=589261 (accessed July 27, 2016).

30. The estate effectively owns all of the proceeds, rents, or profits from these assets as well; see Title 11 U.S. Code § 541.

31. 11 U.S. Code § 362(a).

immediately and automatically prohibits creditors from suing the debtor, or taking any other action to collect what they are owed. The stay even prohibits secured creditors from selling or seizing the collateral (cash or securities) they hold. This process is meant to protect the debtor from a mad rush of creditors trying to obtain what they are owed before anyone else.

The bankruptcy code provides several other protections to help ensure that similarly situated creditors are treated in an equitable manner (meaning that they share any losses in an equitable manner). For example, creditors generally have to seek the court's permission to *set off* what they owe the debtor against any amounts the debtor may owe them.[32] Additionally, the debtor (or a court-appointed trustee) can generally force creditors to return any *preferential transfers*.[33] For instance, a creditor may have to return a payment made within 90 days of bankruptcy if that payment would have made the creditor better off than had the transfer not been made. The amount would have to be returned to the estate so that it would improve the collective position of the creditors.

Similarly, the debtor generally has the power to avoid fraudulent conveyances.[34] For instance, sales or transfers of assets at less than fair value within two years of the filing date can be reversed to benefit *all* creditors. More broadly, creditors generally cannot terminate their contracts with the debtor simply because the firm filed for bankruptcy protection. In fact, even if a contract includes a clause that makes the debtor's bankruptcy a default (an *ipso facto* clause) the clause is generally not enforceable.[35] However, debtors can generally choose which uncompleted contracts (those which have elements of both assets and liabilities for the estate) to reject.[36]

Distortions arise because the bankruptcy code provides derivatives and repo users with safe harbors that leave them in a preferred position relative to ordinary creditors. Based on what occurred during the 2008 financial crisis (discussed below), these safe harbors have at least partially defeated the main purpose of bankruptcy protection. In particular, these safe harbors prevented firms from using the bankruptcy code to reorganize and continue operating because they encouraged certain creditors to individually seek payments outside a collective bankruptcy proceeding rather than negotiate with debtors inside bankruptcy.[37]

Safe Harbors for Derivatives and Repos

The 2005 Bankruptcy Abuse Prevention and Consumer Protection Act expanded several key safe harbors largely by defining the term *swap agreement* to include effectively all derivatives contracts.[38] In particular, this change extended safe harbors to virtually all derivatives users such that the entire market was exempt from the automatic stay and preference provisions. The 2005 act also expanded the definition of *repurchase agreement* to include "mortgage related securities...mortgage loans, interests in mortgage related securities or mortgage loans," as well as several additional items.[39] Thus, since 2005,

32. 11 U.S. Code § 362(a)(7).
33. 11 U.S. Code § 547.
34. 11 U.S. Code § 548.
35. 11 U.S. Code § 365(e)(1) and 11 U.S. Code § 541(c)(1). In general, the debtor's right to contract belongs to the estate.
36. These contracts are typically referred to as executory contracts, and defined as "a contract under which the obligation of both the bankrupt and the other party to the contract are so far unperformed that the failure of either to complete performance would constitute a material breach excusing the performance of the other." See David Skeel and Thomas Jackson, "Transaction Consistency and the New Finance in Bankruptcy," *Columbia Law Review*, Vol. 112 (2012), http://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=1345&context=faculty_scholarship (accessed July 27, 2016). Many of the original sources in this *Backgrounder* are found in Skeel and Jackson, "Transaction Consistency and the New Finance in Bankruptcy."
37. There are several exemptions unrelated to derivatives and repos; 11 U.S. Code § 362(b) lists more than 20 exemptions from the automatic stay provision, related to obligations such as taxes, domestic support, and medical bills. Additionally, the automatic stay cannot preclude criminal prosecution.
38. Edward Morrison and Joerg Riegel, "Financial Contracts and the New Bankruptcy Code: Insulating Markets from Bankrupt Debtors and Bankruptcy Judges," Columbia Law School *Working Paper* No. 291, January 25, 2006, p. 4, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=878328 (accessed July 27, 2016).
39. The appendix of this *Backgrounder* compares the legal definitions of *repurchase agreement* and *swap agreement* before and after the 2005 Bankruptcy Abuse Prevention and Consumer Protection Act was enacted. The definitions are codified at 11 U.S. Code §101 (47) and 11 U.S. Code §101 (53B), respectively.

the bankruptcy code exempted derivatives and repos from two core provisions of bankruptcy: the automatic stay and preference protections.[40]

The code also exempts these contracts from bankruptcy's anti–*ipso facto* rules, the trustee's power to avoid fraudulent conveyances,[41] and even from limitations on a non-debtor's ability to set off obligations owed to the debtor. Unlike ordinary creditors, derivatives counterparties can automatically terminate their contracts as soon as a debtor files for bankruptcy protection.[42] The fact that the debtor's counterparties can seize collateral free from preference protections was a feature that proved especially harmful during the 2008 crisis. Collectively, these safe harbors mean that all derivatives and repo users are—as they were prior to the 2008 crisis—protected parties relative to ordinary creditors.

Weak Justification for Safe Harbors. These safe harbors have been justified on various grounds, most of which relate in some way to systemic crises.[43] For instance, in the early 1980s, industry advocates argued that derivatives markets were too complex to treat counterparties like other creditors, and that if safe harbors were not provided "the whole system would become paralyzed" in a bankruptcy.[44] Similarly, in 1983, Fed Chair Paul Volcker suggested a safe harbor was necessary to protect the repo market given that repos were a main tool of monetary policy. Volcker also argued that limiting these special protections to repo transactions of $1 million or more would suffice, thus avoiding the need to provide broad exceptions to existing bankruptcy laws.[45]

A common argument for safe harbors is that subjecting derivatives counterparties to the automatic stay could cause multiple firms to fail, thus leading to a financial crisis, a recession, or both. A bankruptcy filing could, for instance, cause the firm's counterparties to "run," quickly closing out their positions and selling collateral to avoid being subjected to an automatic stay. This run could result in rapidly declining asset prices, thus destabilizing financial markets. Similarly, proponents of these special exemptions argue that safe harbors allow counterparties to quickly cancel contracts and enter new hedges (with other counterparties), thus ensuring their financial health and avoiding financial market distress.[46]

Aside from whether safe harbors can actually mitigate systemic risk, systemic concerns do not justify blanket exemptions from core bankruptcy provisions. By definition, systemic risk concerns could only justify, at most, exemptions for the largest or most systemically important derivatives counter-

40. Repurchase agreements (repos) and swaps are among the financial contracts that receive exemption from certain core provisions in the Bankruptcy Code. The other main types of financial contracts receiving special protection are forwards, commodity contracts, and securities contracts. Collectively, these five types of contracts are often referred to as qualified financial contracts (QFCs) although the term is not neatly defined in bankruptcy law. See Darrell Duffie and David Skeel, "A Dialogue on the Costs and Benefits of Automatic Stays for Derivatives and Repurchase Agreements," in Kenneth Scott and John Taylor, eds., *Bankruptcy Not Bailout: A Special Chapter 14* (Stanford, CA: Hoover Institution Press, 2012).
41. The code even exempts derivative users from so-called *constructive* fraudulent conveyances, whereby assets are transferred for something less than reasonably equivalent value (see 11 U.S. Code § 548(a)(1)(B)(i)).
42. The contractual right to liquidate, terminate, or accelerate a repo is codified at 11 U.S. Code § 559. The contractual right to liquidate, terminate, or accelerate a *swap* is codified at 11 U.S. Code § 560 and (for a contract under a master netting agreement) at 11 U.S. Code § 561(a). Collectively, these safe harbors are found in the following sections of the code: 11 U.S. Code § 559, 560, 561(a), § 362(b)(7), § 362(b)(17), § 546(g), and § 548(d)(2)(D).
43. For more on these issues, see Skeel and Jackson, "Transaction Consistency and the New Finance in Bankruptcy"; Duffie and Skeel, "A Dialogue on the Costs and Benefits of Automatic Stays for Derivatives and Repurchase Agreements"; Edwards and Morrison, "Derivatives and the Bankruptcy Code: Why the Special Treatment?"; and Bruce Tuckman, "Amending Safe Harbors to Reduce Systemic Risk in OTC Derivatives Markets," Center for Financial Stability *Policy Paper*, April 22, 2010, http://www.centerforfinancialstability.net/research/Safe-Harbor-Systemic-Risk-20100422.pdf (accessed July 27, 2016).
44. This phrase quotes a lawyer representing two clearing associations during a 1981 congressional hearing. Skeel and Jackson, "Transaction Consistency and the New Finance in Bankruptcy," p. 160.
45. Skeel and Jackson, "Transaction Consistency and the New Finance in Bankruptcy," p. 160, footnote 34.
46. Another argument is that safe harbors are necessary to prevent *cherry picking*, whereby a debtor can choose which contracts to reject and which to assume, thus destroying the benefits of *netting* and further destabilizing markets. This fear is misguided because all contracts under a master agreement, such as the standard ISDA agreement, are treated as mutual obligations. Ibid., pp. 161–162 and 186–189, and Stephen Lubben, "Derivatives and Bankruptcy: The Flawed Case For Special Treatment," University of Pennsylvania *Journal of Business Law*, Vol. 12 (2009), https://www.law.upenn.edu/journals/jbl/articles/volume12/issue1/Lubben12U.Pa.J.Bus.L.61(2009).pdf (accessed July 27, 2016).

parties. Identifying such institutions—even using broad guidelines such as those in Dodd–Frank—is far from an objective exercise, a problem which highlights that such safe harbors necessarily provide preferential treatment to certain creditors over others. For this reason alone, providing these safe harbors requires an overwhelmingly compelling justification. This justification simply does not exist, and the 2008 financial crisis provides evidence that safe harbors worsen, rather than mitigate, systemic risk.

Safe Harbors Increase Risk of Financial Turmoil. The 2008 crisis showed that most of these arguments for giving special exemptions to derivatives counterparties are deeply flawed. First, the notion that the automatic stay safe harbor would prevent a run proved to be incorrect. Bear Stearns's counterparties ran before Bear was even considering bankruptcy.[47] Lehman Brothers's problems were also exacerbated by safe harbors. Immediately before the firm collapsed, JP Morgan seized $17 billion in securities and cash (Lehman's collateral) and demanded an additional $5 billion payment.[48] Lehman effectively had no choice but to come up with the additional collateral, thus worsening its liquidity position.

Lehman could not file bankruptcy to prevent Morgan from selling the collateral because of the safe harbors, and Lehman had no reason to expect that it could retrieve the payment as a special preference if it did file for bankruptcy. Furthermore, the lead attorney in the Lehman bankruptcy case testified to Congress that the lack of an automatic stay contributed to confusion at the outset of the filing.[49] The safe harbors also encouraged Lehman's accounting manipulation known as Repo 105, an end-of-quarter transaction used to disguise the company's true leverage. Had repos been treated as secure loans without the safe harbors—as the economic structure of a repo actually justifies—it is unlikely that Lehman could have conducted the Repo 105 transaction.[50]

The safe harbors also played a negative role in the near failure of American International Group (AIG).[51] The company's counterparties increasingly demanded additional collateral for its large CDS portfolio, thus threatening to bankrupt the company. As with Lehman, AIG would have been able to refuse the collateral demands and expect protection had there been no safe harbors for the CDSs.[52] Even if the safe harbors only partly contributed to the runs on these counterparties, it is clear that the safe harbors did not prevent the type of systemic problems that advocates suggested they would.

Aside from the added incentive to run, the safe harbors likely induced firms to rely more heavily on derivatives and repos than they would have in absence of the special protections. For instance, Bear Stearns's liabilities consisted of only 7 percent repos in 1990, but by 2008 they consisted of 25 percent repos.[53] Data also show that the portion of *total*

47. Kate Kelly, "Fear, Rumors Touched Off Fatal Run on Bear Stearns," *The Wall Street Journal*, May 28, 2008, http://www.wsj.com/articles/SB121193290927324603 (accessed August 4, 2016).
48. Iain Dey and Danny Fortson, "JP Morgan 'Brought Down' Lehman Brothers," *The Sunday Times*, October 5, 2008, http://www.thesundaytimes.co.uk/sto/business/article240146.ece (accessed August 4, 2016). Also see Darrell Duffie, "The Failure Mechanics of Dealer Banks," *Journal of Economic Perspectives*, Vol. 24, No. 1 (2010), pp. 51–72, http://www.darrellduffie.com/uploads/pubs/DuffieFailureMechanicsDealerBanks2010.pdf (accessed August 4, 2016).
49. The lead attorney, Harvey Miller, testified: "Lacking the full benefit of a 'breathing space' within the contours of the bankruptcy code, the days that followed were a period of perpetual crisis." Harvey R. Miller, written testimony to the Subcommittee on Commercial and Administrative Law, Committee on the Judiciary, U.S. House of Representatives, 111th Cong., 1st Sess., for hearings on *Too Big to Fail: The Role for Bankruptcy and Antitrust Law in Financial Regulation Reform*, October 22, 2009, p. 9, https://judiciary.house.gov/_files/hearings/pdf/Miller091022.pdf (accessed July 27, 2016).
50. Skeel and Jackson, "Transaction Consistency and the New Finance in Bankruptcy," pp. 164–165.
51. Safe harbors were surely not the only cause of AIG's downfall. See Hester Peirce, "Securities Lending and the Untold Story in the Collapse of AIG," Mercatus Center *Working Paper* No. 14-12, May 1, 2014, http://mercatus.org/sites/default/files/Peirce_SecuritiesLendingAIG_v2.pdf (accessed August 24, 2016).
52. The federal government even invoked the possibility of a mass termination of CDS contracts as a main reason for arranging the AIG bailout. Fed Chairman Ben Bernanke testified to the U.S. House of Representatives that AIG's failure would have "posed unacceptable risks for the global financial system" due in part to the large CDS exposures. See Office of the Special Inspector General for the Troubled Asset Relief Program, "Factors Affecting Efforts to Limit Payments to AIG Counterparties," SIGTARP-10-003, November 17, 2009, p. 9, https://www.sigtarp.gov/Audit%20Reports/Factors_Affecting_Efforts_to_Limit_Payments_to_AIG_Counterparties.pdf (accessed July 27, 2016).
53. Roe, "The Derivatives Market's Payment Priorities as Financial Crisis Accelerator," p. 552. Roe notes that Congress expanded derivatives priorities in 1982, 1984, 1994, 2005, and 2006.

investment bank assets financed by repos doubled between 2000 and 2007.[54] Whether the growing market led to legislative action to further support the market, or whether the legislative amendments to the bankruptcy code led to the growing market is irrelevant. Either way, the market would not have supported such high increases in leverage without the special protections, which is precisely why the safe harbors should not be provided.

The safe harbors also lead to more subtle adverse effects, such as diminishing the incentive to monitor counterparties and to prepare (or even file) for bankruptcy.[55] It is certainly true that eliminating these safe harbors may cause firms to rely less on these short-term debt instruments, and to price in higher risks than they do currently. However, this outcome is not a market failure: It is precisely how markets function when the participants have the proper incentives to monitor their risks.

The fact that the Federal Deposit Insurance Corporation (FDIC) has for decades implemented a special failure-resolution process for banks that imposes a one-day stay on a bank's derivative and repo counterparties makes the case for economy-wide safe harbors even less compelling.[56] This temporary stay for banks provides additional evidence that the safe harbors exacerbated the 2008 crisis because markets froze in the *nonbanking* sector where there were safe harbors, not in the banking sector where a temporary stay was in effect. Rather than relying on contracting and special rules to prevent excessive financial risks, Congress should enact reforms that expose financial market participants to more market discipline.

How Regulators Should Account for OTC Derivatives

There is no objective economic reason to treat derivatives users preferentially relative to any other set of creditors in a bankruptcy case. Thus, a key component of reforming the regulatory framework for derivatives and repos is to remove their bankruptcy safe harbors. Some scholars have argued for a more cautious approach, such as implementing an automatic stay that lasts for 48 hours or 72 hours, and recent bankruptcy-reform legislation includes a 48-hour automatic stay for derivatives and repos that would apply to counterparties of certain large financial institutions.[57]

Similarly, some have argued that *most* of the safe harbors should be eliminated, but that an automatic-stay safe harbor should remain in place for *cash-like* collateral used in repo transactions.[58] This type of proposal is justified on the grounds that repo markets are volatile and their values can change dramatically over very short time periods, with counterparties constantly recalibrating margin and collateral requirements. Economically, though, these market attributes alone provide no justification for bankruptcy safe harbors—they merely describe factors that counterparties would price differently were there no safe harbors.[59] In other words, removing all of the safe harbors would all but certainly impact the market because counterparties would have to

54. Ibid.

55. Skeel and Jackson identify five adverse effects that the safe harbors for derivatives and repos have on financial markets: Skeel and Jackson, "Transaction Consistency and the New Finance in Bankruptcy," pp. 166–168.

56. Historically, the view was that only banks needed a special resolution process to avoid systemic economic problems, but that belief has expanded to include the nonbanking sector. Dodd–Frank introduced new resolution rules for these nonbanking firms, and the one-day automatic stay now applies to derivative and repo contracts held by banks, large bank holding companies, and specially designated (systemically important) nonbank financial companies. Derivatives CCPs are exempt from some aspects of the stay. See Duffie and Skeel, "A Dialogue on the Costs and Benefits of Automatic Stays for Derivatives and Repurchase Agreements," p. 141. The one-day automatic stay (until 5:00 p.m. on the next business day) for banks' counterparties in the FDIC resolution process is codified at 12 U.S. Code §1821(e)(10)(B)(i).

57. The Financial Institution Bankruptcy Act of 2016, H.R. 2947, passed the U.S. House by voice vote on April 12, 2016. Section 1188, Treatment of Qualified Financial Contracts and Affiliate Contracts, implements the automatic stay for QFCs. Essentially the same legislative language is also included in the Financial CHOICE Act, a broader regulatory reform bill introduced in the House in June 2016. Another option is to narrow the safe harbors for derivatives only to those contracts which are cleared (defined as third-party pricing and collateral management). See Tuckman, "Amending Safe Harbors to Reduce Systemic Risk in OTC Derivatives Markets."

58. Skeel and Jackson, "Transaction Consistency and the New Finance in Bankruptcy," pp. 156–157.

59. Typically, the value of a secured creditor's collateral is fixed as of the date of the bankruptcy filing, and the Code (11 U.S. Code § 361 and 11 U.S. Code § 362(d)(1)) provides such a creditor *adequate protection* for the value of the collateral. See Skeel and Jackson, "Transaction Consistency and the New Finance in Bankruptcy," pp. 169–170.

account for more risk, an outcome which should be applauded.

There is also no objective economic reason to regulate derivatives as a unique product. The Dodd–Frank Act took such an approach, and imposed product-based regulations on much of the OTC derivatives market. The outcome of these Dodd–Frank changes is more highly concentrated financial risks, and an incredibly complex set of rules filled with special exemptions and safe harbors. This is exactly the wrong approach because it creates a framework that invites special-interest lobbying for rules that favor certain market participants over others. Ideally, the regulatory framework should provide no special protections for derivative or repo counterparties and focus exclusively on fostering accurate disclosure of relevant information. In an optimal regulatory framework, this disclosure focus could even be applied to banking institutions.

Though the current framework is far from ideal, bringing more market discipline and less taxpayer backing to the banking industry would lessen the need for statutory capital requirements and complex derivatives rules. Even outside that ideal framework, there are many ways that regulatory capital rules for derivatives can be simplified, thus moving toward greater reliance on disclosure. For instance, regulatory relief could be provided to banks that choose to meet a higher capital requirement that accounts for derivatives exposure in a straightforward, transparent manner. This type of leverage ratio (referred to as a regulatory off-ramp) could, for example, include net credit exposure from derivatives and a flat percentage of notional derivative contracts in a bank's total assets.[60] Accounting for derivatives exposure in this type of straightforward, transparent manner would introduce much-needed market discipline to banks and derivatives counterparties.

Congress should implement the following changes to move the U.S. regulatory framework for derivatives toward an ideal system:

- **Repeal Title VII of Dodd–Frank.** Title VII of Dodd–Frank imposes a requirement to clear more OTC derivatives through central counterparties (CCPs), and also gives the CFTC and the SEC explicit authority to regulate the OTC swaps markets and market participants. Title VII is based on the false notion that a lack of regulation caused the financial crisis, and it has served mainly to centralize risk in a small number of large firms, increase moral hazard, and increase the likelihood of a future financial crisis. Repealing Title VII largely reverts to a framework where derivatives are regulated based on which market participants use them and for which purpose, rather than regulated as a unique product. Banks, for instance, would not be able to use derivatives or repos outside their regulatory capital framework if Title VII is repealed.

- **Simplify derivatives regulation for banks.** Banks are regulated differently than most companies largely because taxpayers back FDIC deposit insurance and loan guarantees, as well as (ultimately) Federal Reserve emergency lending. These forms of taxpayer support have to be removed in order for the U.S. framework to fully utilize market-based regulations that rely mainly on disclosure. In the meantime, Congress can provide regulatory off-ramps to banks that elect to meet higher, simpler capital standards, similar to the approach taken in the Financial CHOICE Act. While many other reforms are needed to bring more market discipline to bear on banks and derivatives counterparties, accounting for banks' derivatives exposure in a straightforward, transparent manner (in a regulatory off-ramp requirement) would partly accomplish this goal. Any off-ramp leverage ratio could, for example, include net credit exposure and a flat percentage of notional derivative contracts (both commonly reported already) in total assets. Such a reform would eventually lower the reliance on complex, opaque rules that favor those banks most heavily involved in derivatives markets.

- **Remove safe harbors for repos and derivatives.** The bankruptcy code should be amended so that repo and derivatives counterparties no longer have safe harbors that position them as preferred creditors. Specifically, safe harbors

60. This approach is similar to the one taken in the Financial CHOICE Act. See Norbert J. Michel, "Money and Banking Provisions in the Financial CHOICE Act: A Major Step in the Right Direction," Heritage Foundation *Backgrounder* No. 3152, August 31, 2016, http://www.heritage.org/research/reports/2016/08/money-and-banking-provisions-in-the-financial-choice-act-a-major-step-in-the-right-direction.

from the automatic stay, anti–*ipso facto* rules, and preference and fraudulent conveyances rules should all be eliminated. A temporary automatic stay (for all derivatives and repos) of 48 hours to 72 hours is a good intermediate step, but any such temporary stay should automatically sunset after several years so that the safe harbor is completely eliminated. These safe harbors should be removed for CCPs as well. Even if systemic risk concerns were valid, they would not justify blanket exemptions from core bankruptcy provisions. By definition, systemic risk concerns could only justify, at most, exemptions for the largest or most systemically important derivatives counterparties. Providing safe harbors in this manner would blatantly provide special financial protection to a small group of financial firms. Regardless, safe harbors actually worsened credit market turmoil during the 2008 crisis, while safe harbor advocates had claimed the special exemptions would avoid such problems.

Conclusion

There is nothing particularly unique about derivatives that would require them to have special product-based regulations. Indeed, it is best to avoid regulating derivatives as a unique product because that type of regulation invites rules that favor certain users over others. Ideally, the regulatory framework for derivatives would focus exclusively on fostering accurate disclosure of relevant information, even by financial companies. The U.S. regulatory framework has gone in exactly the wrong direction for decades, providing special exemptions to an increasingly complex set of rules and, as of 2010, regulating derivatives as specific products. Derivatives themselves should no longer be regulated as a distinct product, and the changes implemented by Title VII of the 2010 Dodd–Frank Act should be repealed.

Another main problem with the existing framework—which Dodd–Frank barely addressed—is that the bankruptcy code provides derivatives and repo users with exemptions that leave them in a preferred position relative to ordinary creditors. The turmoil in financial markets during the 2008 crisis shows that the main arguments for giving safe harbors to derivatives and repo counterparties are deeply flawed. Rather than mitigate systemic risk, the safe harbors increased reliance on derivatives and repos, provided higher incentives to run on counterparties, and decreased the incentive to monitor counterparties, as well as to prepare (or even file) for bankruptcy. All such safe harbors should be removed from the bankruptcy code to eliminate disparate treatment for similarly situated creditors.

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Appendix

The following, quoted, text compares the legal definitions of *repurchase agreement* and *swap agreement* before and after the 2005 Bankruptcy Abuse Prevention and Consumer Protection Act was enacted.

Repurchase Agreement as defined in U.S. Code prior to the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005.[61]

> "repurchase agreement" (which definition also applies to a reverse repurchase agreement) means an agreement, including related terms, which provides for the transfer of certificates of deposit, eligible bankers' acceptances, or securities that are direct obligations of, or that are fully guaranteed as to principal and interest by, the United States or any agency of the United States against the transfer of funds by the transferee of such certificates of deposit, eligible bankers' acceptances, or securities with a simultaneous agreement by such transferee to transfer to the transferor thereof certificates of deposit, eligible bankers' acceptances, or securities as described above, at a date certain not later than one year after such transfers or on demand, against the transfer of funds.

Repurchase Agreement as defined in U.S. Code after the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005.[62]

> The term "repurchase agreement" (which definition also applies to a reverse repurchase agreement)—(A) means—
>
> (i) an agreement, including related terms, which provides for the transfer of one or more certificates of deposit, mortgage related securities (as defined in section 3 of the Securities Exchange Act of 1934), mortgage loans, interests in mortgage related securities or mortgage loans, eligible bankers' acceptances, qualified foreign government securities (defined as a security that is a direct obligation of, or that is fully guaranteed by, the central government of a member of the Organization for Economic Cooperation and Development), or securities that are direct obligations of, or that are fully guaranteed by, the United States or any agency of the United States against the transfer of funds by the transferee of such certificates of deposit, eligible bankers' acceptances, securities, mortgage loans, or interests, with a simultaneous agreement by such transferee to transfer to the transferor thereof certificates of deposit, eligible bankers' acceptance, securities, mortgage loans, or interests of the kind described in this clause, at a date certain not later than 1 year after such transfer or on demand, against the transfer of funds;
>
> (ii) any combination of agreements or transactions referred to in clauses (i) and (iii);
>
> (iii) an option to enter into an agreement or transaction referred to in clause (i) or (ii);
>
> (iv) a master agreement that provides for an agreement or transaction referred to in clause (i), (ii), or (iii), together with all supplements to any such master agreement, without regard to whether such master agreement provides for an agreement or transaction that is not a repurchase agreement under this paragraph, except that such master agreement shall be considered to be a repurchase agreement under this paragraph only with respect to each agreement or transaction under the master agreement that is referred to in clause (i), (ii), or (iii); or
>
> (v) any security agreement or arrangement or other credit enhancement related to any agreement or transaction referred to in clause (i), (ii), (iii), or (iv), including any guarantee or reimbursement obligation by or to a repo participant or financial participant in connection with any agreement or transaction referred to in any such clause, but

61. See 11 U.S. Code §101 (47) as of 2000, http://uscode.house.gov/view.xhtml?hl=false&edition=2000&path=%2Fprelim%40title11%2Fchapter1&req=granuleid%3AUSC-prelim-title11-chapter1&num=0 (accessed July 30, 2016).
62. See current edition of 11 U.S. Code §101 (47), http://uscode.house.gov/view.xhtml?path=/prelim@title11/chapter1&edition=prelim (accessed July 30, 2016).

not to exceed the damages in connection with any such agreement or transaction, measured in accordance with section 562 of this title; and (B) does not include a repurchase obligation under a participation in a commercial mortgage loan.

Swap Agreement as defined in U.S. Code prior to the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005.[63]

"swap agreement" means—

(A) an agreement (including terms and conditions incorporated by reference therein) which is a rate swap agreement, basis swap, forward rate agreement, commodity swap, interest rate option, forward foreign exchange agreement, spot foreign exchange agreement, rate cap agreement, rate floor agreement, rate collar agreement, currency swap agreement, cross-currency rate swap agreement, currency option, any other similar agreement (including any option to enter into any of the foregoing);

(B) any combination of the foregoing; or

(C) a master agreement for any of the foregoing together with all supplements.

Swap Agreement as defined in U.S. Code after the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005.[64]

The term "swap agreement"—

(A) means—

(i) any agreement, including the terms and conditions incorporated by reference in such agreement, which is—

(I) an interest rate swap, option, future, or forward agreement, including a rate floor, rate cap, rate collar, cross-currency rate swap, and basis swap;

(II) a spot, same day-tomorrow, tomorrow-next, forward, or other foreign exchange, precious metals, or other commodity agreement;

(III) a currency swap, option, future, or forward agreement;

(IV) an equity index or equity swap, option, future, or forward agreement;

(V) a debt index or debt swap, option, future, or forward agreement;

(VI) a total return, credit spread or credit swap, option, future, or forward agreement;

(VII) a commodity index or a commodity swap, option, future, or forward agreement;

(VIII) a weather swap, option, future, or forward agreement;

(IX) an emissions swap, option, future, or forward agreement; or

(X) an inflation swap, option, future, or forward agreement;

(ii) any agreement or transaction that is similar to any other agreement or transaction referred to in this paragraph and that—

(I) is of a type that has been, is presently, or in the future becomes, the subject of recurrent dealings in the swap or other derivatives markets (including terms and conditions incorporated by reference therein); and

(II) is a forward, swap, future, option, or spot transaction on one or more rates, currencies, commodities, equity securities, or other equity instruments, debt securities or other debt instruments, quantitative measures associated with an occurrence, extent of an occurrence, or contingency associated with a financial, commercial, or

63. 11 U.S. Code §101 (53B) as of 2000, http://uscode.house.gov/view.xhtml?hl=false&edition=2000&path=%2Fprelim%40title11%2Fchapter1&req=granuleid%3AUSC-prelim-title11-chapter1&num=0 (accessed July 30, 2016).

64. See current edition of 11 U.S. Code §101 (53B), http://uscode.house.gov/view.xhtml?path=/prelim@title11/chapter1&edition=prelim (accessed July 30, 2016).

economic consequence, or economic or financial indices or measures of economic or financial risk or value;

(iii) any combination of agreements or transactions referred to in this subparagraph;

(iv) any option to enter into an agreement or transaction referred to in this subparagraph;

(v) a master agreement that provides for an agreement or transaction referred to in clause (i), (ii), (iii), or (iv), together with all supplements to any such master agreement, and without regard to whether the master agreement contains an agreement or transaction that is not a swap agreement under this paragraph, except that the master agreement shall be considered to be a swap agreement under this paragraph only with respect to each agreement or transaction under the master agreement that is referred to in clause (i), (ii), (iii), or (iv); or

(vi) any security agreement or arrangement or other credit enhancement related to any agreements or transactions referred to in clause (i) through (v), including any guarantee or reimbursement obligation by or to a swap participant or financial participant in connection with any agreement or transaction referred to in any such clause, but not to exceed the damages in connection with any such agreement or transaction, measured in accordance with section 562; and

(B) is applicable for purposes of this title only, and shall not be construed or applied so as to challenge or affect the characterization, definition, or treatment of any swap agreement under any other statute, regulation, or rule, including the Gramm–Leach–Bliley Act, the Legal Certainty for Bank Products Act of 2000, the securities laws (as such term is defined in section 3(a)(47) of the Securities Exchange Act of 1934) and the Commodity Exchange Act.53B)