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Rolling Back the Repo Safe Harbors

By Edward R. Morrison*, Mark J. Roe**, and Christopher S. Sontchi***

Recent decades have seen substantial expansion in exemptions from the Bankruptcy Code’s normal operation for repurchase agreements. These repos, which are equivalent to very short-term (often one-day) secured loans, are exempt from core bankruptcy rules such as the automatic stay that enjoins debt collection, rules against prebankruptcy fraudulent transfers, and rules against eve-of-bankruptcy preferential payment to favored creditors over other creditors. While these exemptions can be justified for United States Treasury securities and similarly liquid obligations backed by the full faith and credit of the United States government, they are not justified for mortgage-backed securities and other securities that could prove illiquid or unable to fetch their expected long-run value in a panic. The exemptions from baseline bankruptcy rules facilitate this kind of panic selling and, according to many expert observers, characterized and exacerbated the financial crisis of 2007–2009. The exemptions from normal bankruptcy rules should be limited to United States Treasury and similarly liquid securities, as they once were. The more recent expansion of these exemptions to mortgage-backed securities should be reversed.

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INTRODUCTION

Special rules exempt an increasingly wide arc of creditors from the normal operation of bankruptcy. These so-called “safe harbors” exempt the bankrupt debtor’s financial-contract counterparties from the basic rules that halt creditor collection efforts when the bankruptcy begins, that claw back preferential and fraudulent prebankruptcy transfers that harm creditors overall, and that facilitate orderly liquidation or reorganization. These safe harbors for financial contracts exist for one articulated purpose: to promote stability in financial markets.\(^1\)

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\(^1\) See, e.g., Exploring Chapter 11 Reform: Corporate and Financial Institution Insolvencies; Treatment of Derivatives, Hearing Before the H. Subcomm. on Regulatory Reform, Commercial & Antitrust Law of the H. Comm. of the Judiciary, 113th Cong. 6 (2014) (statement of Seth Grosshandler) [hereinafter Grosshandler Statement], available at http://goo.gl/QpTsgK (“safe harbors” have proven to be very effective in containing the risk of contagion by allowing counterparties to terminate volatile financial contracts with the debtor quickly, thus limiting their exposure to possibly catastrophic losses from the failure of the debtor. This is the very reason why Congress enacted the safe harbors in the first place.”).
Yet there is little evidence that they serve this purpose. Instead, considerable evidence shows that, when they matter most—in a financial crisis—the safe harbors exacerbate the crisis, weaken critical financial institutions, destabilize financial markets, and then prove costly to the real economy. Worse, the best available evidence also shows that the safe harbors distort the capital structure decisions of financial firms by subsidizing runnable short-term financing at the expense of other, safer debt channels, including longer-term financing. When financial firms favor volatile short-term over more stable long-term debt, they (and markets generally) are more likely to experience a "run" in the event of a market shock, such as the downturn in housing prices during the most recent recession.

It is time for the Bankruptcy Code to get out of the business of regulating financial markets. Other institutions—the Federal Reserve and Treasury—are better suited for this task. The Bankruptcy Code should therefore be returned to about where it stood in 1984: safe harbors should exist only for agreements involving United States Treasury securities and several other, highly liquid assets (e.g., bank certificates of deposit, eligible bankers' acceptances, and agency securities\(^2\) backed by the government's full faith and credit). Safe harbors for these repos can be justified on grounds that have nothing to do with systemic risk management and they are at base sufficiently liquid and likely to retain fundamental value in a crisis that they pose no real systemic risk.\(^3\) For all other repos, such as mortgage-backed repos, the core rationale for safe harboring them—reducing systemic risk—lacks foundation. Their safe harbor should therefore be eliminated and they should be returned to ordinary bankruptcy practice.

Two of us have written on the scope of the safe harbor previously.\(^4\) We focus here in this article on the safe harbors for repurchase agreements ("repos")—even though the protections for swaps and other financial contracts should be narrowed as well\(^5\)—because the safe harbors for a wide array of repos are the most dangerous to financial stability. We are not the first to make this point.\(^6\)

\(^2\) On agency securities and the safe harbors generally, see Shmuel Vasser, Derivatives in Bankruptcy, 60 Bus. LAW. 1507, 1511–13 (2005). Bankers' acceptances are not in modern times an important category, although the category persists in the statute.


\(^6\) See generally sources cited at supra notes 4 and 5. Our proposal resembles reforms advocated by legal scholars and economists. See, e.g., Thomas Jackson & David Skeel, Transaction Consistency and
In this paper we aggregate and evaluate the existing evidence, sharpen arguments made by prior scholars (including ourselves) and regulators, and examine the counter-arguments that proponents of the safe harbors commonly make.

The fundamental problem is this: The repo safe harbors exacerbated the financial crisis of 2007–2009 by encouraging the use of short-term repo financing by major American financial firms. The bulk of repo volume is overnight and the vast majority has a maturity of less than three months. This expansion of repo led that market to use securities that could not, and did not, retain their value in the crisis, thereby worsening the crisis and weakening financial firms and markets. The broad expansion of short-term repo, particularly repos of mortgage-backed securities, made major American financial firms more sensitive to financial shocks, more sensitive to disruption in the housing market, and more likely to propagate those shocks through the financial system via rapid close-outs, such as those that induced massive government backing of the financial system in 2007–2009.

That government backing included a guarantee of the money market industry after the Reserve Primary Fund broke the buck in the wake of Lehman’s failure, the rescue of AIG after the Lehman failure, the bailout of government-sponsored enterprises—Fannie Mae and Freddie Mae—that issue widely repo’ed securities, and the Federal Reserve’s Primary Dealer Credit Facility— sized in the tens of billions of dollars—to support the repo market. This wide and deep governmental support makes clear that, although it is often mistakenly thought (particularly by industry representatives) that the safe harbors mitigate systemic risk, the reality is that the safe harbors both (1) make too many core financial institutions more fragile, by facilitating their reliance on short-term debt that is unstable in a crisis and (2) shift the epicenter of systemic risk to other sectors of the financial market, particularly after the government buttresses the safe-harbored market.

Today, proponents of the current safe harbors sometimes argue that regulators are bringing systemic risks under control, thanks to various federal and international regulatory changes. But if systemic risks are being brought under control, what then remains of the original rationale for the safe harbors? Either systemic risk still matters in bankruptcy, or it does not. If systemic risk is relevant (as we
conclude it may be), the evidence indicates that the safe harbors exacerbated systemic disturbance during the financial crisis. If systemic risk is not relevant (as proponents of the safe harbors sometimes assert), then bankruptcy should return to first principles, without the deep carve-outs (beyond U.S. Treasury securities) from the automatic stay, preference law, fraudulent conveyance law, and the limitation on *ipso facto* clauses.

Hence, we recommend scaling back the repo safe harbor to approximately the 1984 scope for "repurchase agreements," namely, safe harboring only repos on U.S. Treasury and agency securities backed by the government's full faith and credit, certificates of deposits, and bankers' acceptances. This proposal is consonant with recommendations from leading economists and legal scholars and federal regulators. The Bankruptcy Code's safe harbors for other financial contracts should be narrowed as well, to ensure that the other safe harbors do not provide end-runs around the narrowed scope of the repo safe harbors. Equally important, the Bankruptcy Code's rules governing adequate protection, setoff rights, and assumption and rejection of executory contracts should be modified to protect contracting parties better in general and to better protect financial contract counterparties in particular. The latter often face substantially greater costs from the bankruptcy process than other creditors and nonfinancial counterparties. Indeed, these costs are a driver of demand for safe-harbor financial contracts. Reducing these costs will reduce the demand for financial instruments that short-circuit the Bankruptcy Code.

Although we address only the Bankruptcy Code in this article, its logic would support comparably narrowing the safe harbors in other federal statutes—e.g., the Federal Deposit Insurance Act and the Dodd-Frank Act.

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8. The 1984 Code safe-harbor securities transactions between securities dealers and similar entities. Mortgage-backed securities were not as widespread in the marketplace at that time.

9. See, e.g., Duffie & Skeel, supra note 5; Jackson & Skeel, supra note 5; sources cited at supra note 4.

10. See Thomas M. Hoenig & Charles S. Morris, *Restructuring the Banking System to Improve Safety and Soundness* 16 (2011), available at http://go.ao.gl/pUmTqC ("[T]he bankruptcy law for repurchase agreement collateral should be rolled back to the pre-2005 rules. This change would eliminate mortgage-related assets from being exempt from the automatic stay in bankruptcy when a borrower defaults on its repurchase obligation."). Thomas Hoenig was then-President of the Federal Reserve Bank of Kansas City and is now Vice Chairman of the Federal Deposit Insurance Corporation.

11. We do not here address the safe harbors for swaps and other derivatives transactions.


13. Banking statutes govern the resolution of banks, but the Bankruptcy Code is the initial legal structure to resolve bank holding companies, most bank affiliates, insurance holding companies, and many nonbank financial institutions.
I. BACKGROUND

A repurchase agreement ("repo") is a type of short-term financing that is economically equivalent to a secured loan. In Bevill, Bresler & Schulman Asset Management Corp. v. Spencer S&L Ass'n (In re Bevill, Bresler & Schulman Asset Management Corp.), the Third Circuit succinctly described repos as follows:

A standard repurchase agreement, commonly called a "repo," consists of a two-part transaction. The first part is the transfer of specified securities by one party, the dealer, to another party, the purchaser, in exchange for cash. The second part consists of a contemporaneous agreement by the dealer to repurchase the securities at the original price, plus an agreed upon additional amount on a specified future date. A "reverse repo" is the identical transaction viewed from the perspective of the dealer who purchases securities with an agreement to resell.14

A repo is economically equivalent to a secured loan because the dealer receives funds immediately and promises to repay those funds, plus a premium (i.e., interest), at a future date. The transaction is secured by the securities. Courts15 and commentators16 are well aware of this economic equivalence.

Many market participants utilize the repo market, most notably the Federal Reserve, which uses the repo market to implement monetary policy, principally via repos on Treasury securities and agency debt.17 Sophisticated institutional investors use it to safely meet short and long-term liquidity needs, corporations and money market funds use it for cash management, and broker-dealers use it to finance their securities inventory and other investments. (This is sometimes called "shadow banking."18) As of 2010, U.S. Treasury and agency securities (including agency mortgage-backed securities and securities not backed by the full faith and credit of the United States) made up about 75 percent of collateral used in repo transactions.19 The U.S. Treasury repo market is a critical component not only of the U.S. capital markets, but also of global capital markets. It has become a principal means of financing the market for U.S. government securities.

The repo market has expanded from its U.S. Treasury securities base to include other types of financial investments, such as mortgage-backed securities
and mortgage loans.20 This expansion in the repo market has coincided with expansion in the Bankruptcy Code's safe harbors for repos. The safe harbor for "securities contracts" first appeared in the Bankruptcy Code in 1982.21 Two years later, in 1984, Congress added the safe harbor for "repurchase agreements."22 "Repurchase agreements" were defined (in section 101(47)) as agreements that provided for the transfer of one or more of the following instruments: (1) certificates of deposit; (2) eligible bankers' acceptances; and (3) 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.

In 2005, Congress expanded the range of safe-harbored repos by amending the definition of "repurchase agreement" to include transfers of the following additional instruments23:

- mortgage loans;
- mortgage-related securities (as defined in section 3 of the Securities Exchange Act of 1934);
- interests in mortgage-related securities or mortgage loans; and
- qualified foreign government securities (defined as securities that are direct obligations of, or that are fully guaranteed by, the central government of a member of the Organization for Economic Cooperation and Development).24

Congress also expanded the definition of "securities contract" in section 741(7) to include a contract for the purchase, sale, or loan of a security, a certificate of deposit, a mortgage loan, any interest in a mortgage loan, a group or index of [the foregoing], . . . or option on any of the foregoing, . . . and including any repurchase or reverse repurchase transaction on any such security, certificate of deposit, mortgage loan, interest, group or index, or option (whether or not such repurchase or reverse repurchase transaction is a "repurchase agreement," as defined in section 101).25


Although the securities contract safe harbor is available to a narrower set of market participants—a "stockbroker, financial institution, financial participant, or securities clearing agency"—than the repo safe harbor, virtually all systemically important financial institutions are eligible for protection as "financial institutions" or "financial participants."

The safe harbors for repurchase agreements exempt favored creditors from the operation of normal bankruptcy practice, such as the automatic stay (stopping collection efforts outside of the bankruptcy court), avoidance recovery (of preferential and fraudulent prebankruptcy transfers from the debtor to the favored creditor), and the limitation on the creditor's right to immediately and fully setoff and net monies it owes the debtor against sums the debtor owes it. The relevant Bankruptcy Code provisions are:

- Sections 555 and 559, which protect the safe-harbored creditors' contractual rights to liquidate, terminate, and accelerate repurchase agreements—rights that are normally suspended in bankruptcy;
- Sections 362(b)(7) and 362(o), which protect repo counterparties' setoff rights and their rights to realize against margin or other collateral posted by the debtor (exercise of these rights is normally barred by the automatic stay); and
- Sections 546(f) and 548(d), which shield repo counterparties from preferential or fraudulent transfer actions seeking to recover margin, settlement, or other payments made in connection with the repo agreements.

Together, these provisions permit counterparties to exercise nearly all out-of-bankruptcy contractual rights, notwithstanding the baseline automatic stay and avoidance powers of the bankruptcy court. As Collier explains, "[m]ost repurchase agreements afford a non-defaulting party the right to 'close-out' or 'liquidate' the agreement upon the other party's default." Inside bankruptcy, other creditors cannot exercise these contractual rights to terminate their contracts with the bankrupt debtor; safe-harbored creditors can. They are effectively exempt from bankruptcy.

Furthermore, virtually all repos contain ipso facto clauses, as do many loans and executory contracts. These clauses give the favored party the right to declare a default, terminate the contract, and accelerate any obligations owed by the debtor if

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27. A "financial participant," for example, includes an entity that entered into protected financial transactions (swaps, repos, forwards, etc.) worth at least $1 billion in notional value (or $100 million in mark-to-market value) at some point during the fifteen months preceding the bankruptcy filing date. Id. § 101(22A).
28. For the baseline bankruptcy rules, see generally id. § 362(a)(7) (setoffs); id. § 362(d) (automatic stay); id. §§ 365, 541(c)(1) (debtors contract right is property of the estate); id. § 365(e)(1) (providing for unenforceability of ipso facto clauses that make the debtors bankruptcy a default under its contract); id. § 547 (requiring return of preferences); id. § 548 (fraudulent conveyance liability for mismatched consideration).
29. 5 COLLIER ON BANKRUPTCY, supra note 20, ¶ 559.04.
it files for bankruptcy, becomes insolvent, or fails to maintain itself as financially sound.\textsuperscript{30} Clauses like these are typically nullified in bankruptcy because otherwise neither a reorganization nor even an effective liquidation is normally possible. Not so for safe-harborred financial contracts like repos. With respect to these contracts, \textit{ipso facto} clauses are fully enforceable.

II. \textbf{PRINCIPLES FOR POLICYMAKERS}

These departures from basic bankruptcy rules need justification. Financial contracts should receive safe harbor treatment only when benefits exceed costs. Proponents of the current safe harbors typically point to two related benefits: (1) improving the liquidity of collateral and reducing financing costs and (2) reducing systemic risk.\textsuperscript{31} Neither justification, however, can support the broad departures from normal bankruptcy practice.

A. \textbf{BENEFITS}

1. \textbf{Liquidity and Financing Costs}

The safe harbors undoubtedly improve the liquidity of repurchase agreements and the underlying collateral. Because counterparties can terminate repos and liquidate collateral, regardless of any bankruptcy filing by the debtor, the safe harbors allow counterparties to avoid bankruptcy-specific costs of distress, such as inadequate protection of collateral values, deviations from absolute priority, and cherry-picking of executory contracts by the debtor (assuming in-the-money contracts and rejecting out-of-the-money contracts with the same counterparty). These costs are thought to be non-trivial and to exceed the costs associated with terminating repos and liquidating collateral outside bankruptcy.\textsuperscript{32} Because the safe harbors allow counterparties to avoid these costs, the collateral is more "liquid" in the sense that it can be sold at a price close to its fundamental value. The more liquid the collateral, the lower the costs of default to counterparties. And lower costs of default translate into better terms of trade for debtors: Debtors receive a higher purchase price for securities (a smaller "haircut") when these securities can be liquidated at lower cost.\textsuperscript{33}

\textsuperscript{30} Id. ¶ 559.04, 559 LH.

\textsuperscript{31} See, e.g., Grosshandler, \textit{supra} note 1. These purported benefits to the American economy are not fully distinct. They overlap.

\textsuperscript{32} In the model of Auh & Sundaresan, \textit{supra} note 12, these bankruptcy-specific costs drive the demand for safe-harborred repos. In the absence of these costs, the safe harbors for repos would have no effects on liquidity.

\textsuperscript{33} Grosshandler, \textit{supra} note 1, at 4 ("One of the tangible effects of the safe harbors under 'business as usual' conditions, that is, prior to a bankruptcy, is the increase of the liquidity of Safe Harbored Contracts, which reduces both the cost of these transactions and the costs to the issuers of the assets underlying the transactions—the securities or commodities being bought or sold, the mortgages and credit card receivables being financed, the risks being hedged. These benefits flow directly from the certainty provided to market participants that, in the event of the failure of their counterparty, they will be able to realize the value of their bargained-for security, crystallize their loss and hedge the risk related to their counterparty's failure.").
2. Shadow Banking

The safe harbors played an important role in the growth of shadow banking. Corporate cash managers, as well as pension and mutual funds, investment banks, and other institutional investors with large cash reserves want immediate access to this cash, but would also like to earn a return on the cash until it is needed. Safe-harbored repos provide the solution: They function like demand deposits, but without the government guarantee. The cash provider earns a small return on its cash, the investment is safe because the repo's duration is generally very short (often overnight), and the underlying collateral can be liquidated without interference from the Bankruptcy Code.

3. Systemic Risk

Because they improve the liquidity of collateral, the safe harbors are thought to mitigate systemic risk. In the event of a debtor's default, counterparties can quickly terminate contracts with the debtor, liquidate collateral to cover any losses, and re-hedge by entering new contracts with new debtors. In this way, the debtor's distress will have no knock-on effects on the counterparties. In the absence of the safe harbors, counterparties would incur larger losses due to the various bankruptcy-specific costs, and these losses might trigger distress at the counterparties themselves. Additionally, the safe harbors may increase the supply of credit to institutions suffering liquidity crises, potentially allowing them to avoid collapse. A distressed institution typically faces a “debt overhang” problem: It cannot readily attract new loans because creditors worry that if they lend, some of the value of that loan will support the prior distressed debt and not the new loan. By reducing costs of default and by making the new lender's recovery more certain, the safe harbors ease the debt overhang problem and thereby allow distressed institutions to attract new investment and potentially avoid default.

B. Costs

The costs of the safe harbors are mirror-images of the benefits.

34. See generally Gorton & Metrick, supra note 5, at 276–79.
35. A transactionally complex implication: Repos are often used to hedge derivative positions and to short securities. Id. at 278–79. Because repo collateral can be “rehypothecated,” repos provide an important vehicle for shorting securities, which can improve market efficiency. While this market is a useful one for its participants, it is unclear whether the safe harbors are vital for it.
36. To ease discussion, we use the terms “borrower,” “lender,” and “collateral” in place of “seller,” “purchaser,” and “purchased securities,” notwithstanding that repos are structured formally as purchases and sales of assets, and not as secured loans. This vocabulary of collateral, borrower, and lender is conventional in the industry.
1. Liquidity and Financing Costs

Liquidity does not come for free. The safe harbors enhance liquidity in repo markets by reducing liquidity in other markets, especially markets for traditional, long-term lending. Because safe harbor benefits are available for some kinds of financing (repos, which are largely short-term credit facilities) but not others (traditional, longer-term lending and other shorter-term markets), the Bankruptcy Code is implicitly subsidizing some markets at the expense of others.\(^{37}\) Liquidity is shifted from one market to another. In the process, the safe harbors artificially distort the capital structure of financial institutions toward less stable, run-prone financing. Even worse, the costs of this risk-shifting are borne by the public, the U.S. Treasury, and the American taxpayer via increased financial instability.

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37. In the event of financial failure, non-safe-harbor creditors (oftentimes longer-term creditors) will be less likely to be paid immediately, while safe-harbor creditors (oftentimes shorter-term creditors) are permitted to immediately liquidate collateral—this thereby contributes to a market preference for safe-harbor debt over non-safe-harbor funding, all else equal.

38. This figure comes from Tobias Adrian, Christopher R. Burke & James J. McAndrews, *The Federal Reserve's Primary Dealer Credit Facility*, *Fed. Res. Bank of N.Y.: Current Issues in Econ. & Fin.*, Aug. 2009, at 1, 2 (2009) (Figure 1 in original). We added the vertical line for October 2005, to identify the years before and after the repo safe harbors were expanded.
Mortgage loan repurchase agreements, for example, substitute for warehouse loans. The former are safe harbored from normal bankruptcy rules, the latter are not. The former are thereby favored financially and made more liquid, but the latter are disfavored and made relatively less liquid. We see no principled reasons to favor the favored and disfavor the disfavored. One Federal Reserve report describes this problem and illustrates the sharp increase in overnight repo financing and illiquid collateral in the run-up to the financial crisis:

[Conditions in 2008 [became] particularly precarious [due to] the resort to less liquid collateral in repo agreements. . . . Originally focused on the highest quality collateral—Treasury and Agency debt—repo transactions by 2008 were making use of below-investment-grade corporate debt and equities and even whole loans and trust receipts. This shift toward less liquid collateral increased the risks attending a crisis in the market since, in the event of a crisis, selling off these securities would likely take time and occur at a significant loss.40]

Figures 1 and 2 illustrate the rapid growth of short-term (overnight) financing via repo during the years after October 2005, when the Bankruptcy Code's repo safe harbors expanded substantially. Figure 1 shows that, in terms of dollar volume, short-term repos increased sharply after 2005, while longer-term repos stayed relatively constant. Figure 2 is more important: It shows that repos involv-

39. Id. at 4 (Figure 3 in original). We added the vertical line for October 2005, to identify the years before and after the repo safe harbors were expanded.
40. Id. at 3–4.
ing illiquid collateral, such as mortgages and mortgage-backed securities, accounted for an increasing share of primary dealer repos. By 2008, they accounted for nearly 60 percent of all primary dealer repos. Although these figures cannot prove causal relationships, they provide suggestive evidence that the safe harbors facilitated the over-reliance of financial institutions on short-term financing with relatively illiquid collateral.

The safe harbors, in other words, plausibly encourage less stable financing for our largest and most important financial institutions, thereby making it more likely that a stressed institution will need to liquidate in a costly way. Those who might be prepared to lend long term to an important financial institution would, all else equal, be induced by the safe harbors to lend short term (via repo) and roll over that repo on a regular basis. They are then incentivized to decline to rollover (to run) in the event of a financial crisis or in the event of financial difficulty with the borrower. This broad safe harboring policy is unwise. It weakens American financial structures and institutions.\(^4\)

To be sure, the foregoing argument assumes that the safe harbors merely "move" liquidity around, favoring some markets (repos) and not others (longer-term financing). The net "liquidity effect" of the safe harbors might not be zero. The safe harbors could have a net positive effect, increasing liquidity overall and lowering the cost of capital of institutions that rely on repo financing. This is plausible if the safe harbors allow counterparties to avoid substantial costs associated with the bankruptcy process, such as administrative expenses and inadequate protection of collateral values, which are deadweight costs, and violations of absolute priority (such as inappropriate distribution to shareholders). Because they avoid these costs, repo counterparties offer more liquidity on better terms to borrowers. This argument, however, implies that every creditor should be free to contract around the Bankruptcy Code. Every creditor should enjoy the safe harbors. We take no position on the longstanding academic debate\(^4\) over whether a wide array of creditors should be free to contract around bankruptcy. But if the safe harbors increase social welfare because they increase liquidity overall (and not just for the benefited creditors at the expense of other creditors), then the safe harbors should apply to all secured debt, not just financial contracts.

But one should be uncertain whether there is a net liquidity gain for the economy or, indeed, for a particular debtor. The "net liquidity effect" of the safe harbors could well be negative if they make it more difficult to reorganize a debtor that used safe-harbored repos or if they disrupt an economy-wide market. When a debtor files for bankruptcy, most counterparties are stayed from terminating

\(^4\) Some of this disfavoring of long-term finance over short-term finance arises from how baseline bankruptcy rules treat the time value of money. Appropriate compensation for the time value of any delay to both sets of creditors, prioritized at the underlying priority level of the principal amount, would even up the bankruptcy value of safe-harbored and non-safe-harbored investments. (Because the safe-harbored investors can close out immediately, they are less concerned with the time value of any delay in realization than are non-safe-harbored investors.) This possibility should be an issue for further analysis.

their agreements with the debtor and/or engaging in self-help remedies against estate assets that serve as their collateral. These baseline bankruptcy rules do not apply to repo counterparties. These safe-harbor counterparties can, and will, rapidly close out their positions, selling their collateralized assets into the marketplace at whatever price they can get. If there is widespread selling, there can be a rapid destruction of collateral value as counterparties, unimpeded by the automatic stay, terminate and enforce their rights in debtor assets that serve as collateral. In other words, the safe harbors may have both redistributive effects (favoring repos at the expense of other financing) and deadweight costs (causing value destruction in the event of default). If the safe harbors facilitate widespread selling of the underlying collateral, and if the collateral does not maintain its fundamental value, then owners of that collateral will have reason not to sell that collateral, waiting for its value to recover. This process, which seems to have been at work in the financial crisis, dries up liquidity.

Hence, in principle, the net liquidity effect of the safe harbors could be positive, negative, or zero.

2. Shadow Banking

Safe-harbor repos allow financial institutions to offer the equivalent of demand deposits. Outside of a crisis, shadow banking expands the ability of banks to fund risky, illiquid investments such as mortgages. In a crisis, shadow banking exposes financial institutions to destructive runs. Although safe-harbor repos replicate demand deposits, they lack the FDIC guarantee that applies to true demand deposits. The "on demand" feature of safe-harbor repos is both their virtue and their vice, as the next subsection discusses in greater detail.

3. Systemic Risk

The safe harbors have long been justified on the ground that they mitigate systemic risk by reducing contagion. Three reasons show why this common assertion is false.

a. Raising Systemic Risk by Encouraging Short-term Finance

The additional credit that the safe harbors facilitate allows a systemically important financial institution to become larger, more leveraged with more easily runnable debt, and—as a result—more systemically important and more dangerous both before and after it becomes distressed. Repo use, for example, expanded greatly during the run-up to the financial crisis, growing faster than financial debt grew overall in the American economy. Many observers view the safe harbors as necessary for this expansion.


44. Total financial sector debt was reported in 2010 to have been twenty times larger than it was in 1981. The repo market overall was fifty times greater than its 1981 size. Much of the greater growth
This growth in short-term finance rendered American financial institutions more fragile than they would have been without the safe harbors. Worse, when these institutions suffered distress, repo counterparties could refuse to renew the contracts or demand additional collateral before agreeing to renew the contracts, and they did. This “rollover risk,” when realized, drained liquidity from these institutions and thereby exacerbated financial stress instead of relieving it.

Opponents of reform often emphasize that the safe harbors increase the supply of credit to an institution suffering a liquidity crisis. They point to J.P. Morgan’s willingness to continue supplying liquidity to Lehman as it foundered. But Lehman’s acute need for liquidity was itself a product of the safe harbors, which encouraged it to rely on short-term financing and to have large safe-harbor obligations before the crisis. When Lehman foundered, it needed to replace this financing. Put differently, one of the most lauded purported benefits of the safe harbors—increasing the supply of liquidity to failing institutions—is a feature that only partially mitigates a problem that the safe harbors themselves create, namely, capital structures that overly rely on short-term, run-prone financing. Thus, even a core safe harbor benefit—facilitating crisis financing—comes packaged with serious negatives—facilitating runs, encouraging interconnectedness via repo, expanded run-prone, short-term financing, and excessive leverage.

b. Raising Systemic Risk by Facilitating Runs

Second, by permitting counterparties to “run” on failing institutions, as stated in the prior paragraph, the safe harbors accelerate failure and exacerbate the risk of systemic collapse. This is a lesson of the Lehman Brothers bankruptcy: during the days preceding and following the filing, counterparties refused to roll over repos (or demanded larger haircuts) and terminated other financial contracts en masse, effectively draining Lehman of liquidity. Had Lehman not become so

dependent on safe-harborred repos—more than one-third of its liabilities were said to be in repo—it might have been better positioned to weather the crisis long enough for a more stable solution to emerge. Opponents of narrowing, who point to the Lehman close-outs as a success, ignore that the safe harbors put Lehman in the fragile position it occupied. Opponents also ignore the knock-on failures in the money market and elsewhere—failures that were every bit as serious as those that the contagion rationale for safe harbors is supposed to prevent.

c. Raising Systemic Risk by Depressing Collateral Values During a Crisis

By facilitating runs on systemically important financial institutions, the safe harbors induce the institutions' counterparties to terminate all financial contracts en masse, via cross-default clauses, and liquidate the supporting collateral en masse. En masse liquidation of collateral other than the safest (i.e., United States government obligations) typically leads to low-price fire-sale close-outs, further weakening the target institution and temporarily depressing the market value of comparable collateral held by other institutions. These two effects—fire sales and depressed collateral values generally—spread the distress at the failing institution to other, initially healthier institutions. Recent empirical work confirms the importance of these fire-sale externalities.48

The safe harbors, in other words, facilitate contagion.49 Part of the reason they facilitate contagion is that they are built on old-school contagion concepts: If X defaults on obligations to Y, Y may suffer large losses that force it to default on its own obligations to Z, which may in turn default on its obligations to its counterparties, and so on throughout the financial system. This is the "dominos" theory of systemic risk. But systemic risk can arise from other channels: If X defaults on obligations to Y, Y will liquidate collateral posted by X. If X defaults on many obligations to many parties, all of these counterparties will liquidate the same type of

Learned from the Lehman Bankruptcy, in BANKRUPTCY NOT BAILOUTS: A SPECIAL CHAPTER 14, at 79 (Kenneth E. Scott & John B. Taylor eds., 2010) (reporting that 80 percent of Lehman’s derivative portfolio was terminated within the first five weeks after the bankruptcy filing).


49. Two Fed researchers state:

There is an apparent puzzle at the heart of the 2007 credit crisis. The subprime mortgage sector is small relative to the financial system as a whole and the exposure was widely dispersed through securitization. Yet the crisis in the credit market has been potent. Traditionally, financial contagion has been viewed through the lens of defaults, where if A has borrowed from B and B has borrowed from C, then the default of A impacts B, which then impacts C, etc. However, in a modern market-based financial system, the channel of contagion is through price changes and the measured risks and marked-to-market capital of financial institutions. When balance sheets are marked to market, asset price changes show up immediately on balance sheets and elicit response from financial market participants. Even if exposures are dispersed widely throughout the financial system, the potential impact of a shock can be amplified many-fold through market price changes.

collateral that Y is liquidating. Not only will Y (and the other counterparties) fetch fire sale prices for the collateral, but any other institution (say, Z) holding that type of collateral will need to mark its balance sheet accordingly to reflect the new market prices. In this way, X's distress spreads to Z through the market for collateral, even though X does no business with Z. Because the safe harbors facilitate fire sales of collateral, they magnify this channel of contagion. One channel of contagion (dominos) is mitigated while another (the collateral channel) is exacerbated.

A growing battery of evidence highlights the importance of the collateral channel as a vector of contagion. We now know that there was a "run on repo" and other sources of short-term funding during the financial crisis— the very harm that the safe harbors were constructed to avoid. There was panic selling across financial markets of mortgage-backed securities. Several Federal Reserve Governors have pointed to this panic and run as critical to the financial crisis. This panic selling, which was supported by overly wide safe harbors and could not have been as wide without them, may well have pushed prices of some of the underlying securities temporarily below their long-run value, making financial institutions appear to be insolvent or less solvent than they would otherwise have been.

The analytic misstep that one might make, and which safe harbor proponents appear to make, is to assume that the local benefit of the safe harbors to an individual market participant scales up to also be an aggregate benefit of the safe harbors to the entire repo market. It does not. If only one firm with one safe-harbored repo counterparty fails, then the counterparty can quickly liquidate the collateral and maintain the firm's own liquidity, because its sale will not disrupt the market overall. This can be a good, local result. But if many counterparties of major failed firms liquidate their repo collateral simultaneously, a result that the safe harbors

50. Gary B. Gorton & Andrew Metrick, Securitized Banking and the Run on Repo, 104 J. Fin. Econ. 425, 428 (2012); Arvind Krishnamurthy, Stefan Nagel & Dmitry Orlov, Sizing Up Repo (Nat'1 Bureau of Econ. Research Working Paper No. 17768, 2012), available at http://www.nber.org/papers/w17768. To be sure, we do not think that a complex phenomenon such as the financial crisis grew solely from an overly wide ambit for the repo safe harbors. Rather our view is that a negative economic event occurred, could occur again, and the wide safe harbors played a supporting role. Without that support, we do not believe the crisis would have been averted. But if multiple reforms are undertaken, the financial system can be made safer. Narrowing the repo safe harbor is one of the appropriate reforms in a wider package.

51. The "deleveraging spiral" that led to en masse fire sales of mortgage-related securities is described by Federal Reserve economists in BEGALLE, MARTIN, McANDREWS & MCLAUGHLIN, supra note 7, at 2.


While presiding over one of the Fed's regional banks and serving as a voting member of the Federal Open Market Committee (FOMC), the current FDIC vice chair called for a repo rollback along the lines outlined here. See Hoenig & Morris, supra note 10, at 16–17. Other, academic analyses have concluded similarly. See Skeel & Jackson, supra note 5, at 177–79; Roe, supra note 4.
facilitate, then the liquidity benefit can be (and it seems was) reversed. The safe harbors encourage liquidity at low usage levels; they impede liquidity at large usage levels. Policymakers must guard against wishful thinking here, expecting that what works on the micro-level of a single failed firm with a small set of counterparties will work as well, or even in the same direction, when many firms are liquidating collateral underlying their safe-harbored repos.

C. COSTS AFTER DODD-FRANK

It could be argued that, if the safe harbors contribute to the too-big-to-fail problem, that problem is better addressed by Title I of Dodd-Frank and other statutes than by amending the Bankruptcy Code, which affects all debtors, regardless of whether they are too-big-to-fail. Title I of Dodd-Frank undoubtedly moderates the risk-taking of systemically important institutions and the associated regulatory monitoring of major financial firms further does so. Indeed, if there were widespread agreement that the Dodd-Frank Act has relegated systemic crises to history's dustbin, we would be less concerned about the safe harbors being an unjustified deviation from bankruptcy basics, as the damage from their deviation from basic bankruptcy principles might only be slight if there were no more systemic financial crises.

But systemic crises are unlikely to be a thing of the past, and regulation is unlikely to be perfect. Some financial institutions will become too-big-to-fail, despite regulators' best efforts, and some of those too-big-to-fail institutions will become distressed despite existing statutory and regulatory safeguards. Moreover, Dodd-Frank's orderly liquidation authority and its regulatory initiatives are untested and may fail. A strong way to moderate these risks is to reduce the scope of the safe harbors, which allow distressed institutions to become larger, more leveraged, and more threatening to market stability. Like engineers who seek redundancy and backup in complex systems, bankruptcy reformers should seek a Code that supports financial stability, not one that undercuts it.

Finally, this systemic risk counterargument to narrowing the repo safe harbor—that systemic risk is now handled, and handled well enough, by Dodd-Frank's Title I—undercuts, and perhaps destroys, the foundational justification for the safe harbors in the first place. Their foundational bankruptcy justification was to help control systemic risk. But the safe harbors should be eliminated—not narrowed—if systemic risk is now best addressed through the "front door" of Dodd-Frank and related regulation rather than the "back door" of the Bankruptcy Code. The primary justification for the safe harbors is their role in mitigating systemic risk. If that role has been assumed by other laws and regulations, the original foundation of the safe harbors has crumbled.

III. NARROWING THE REPO SAFE HARBORS

The challenge for policymakers is clear. The repo safe harbors increase the risk and amplitude of crises, but also increase asset liquidity and the supply of credit outside of crises. The first effect must be balanced against the second. Various
proposals have been put forward to achieve this balance, but most rely heavily on a federal regulator to monitor the repo market, limit the kinds of collateral that are repo-ed, set position limits, and perhaps impose taxes that force counterparties to internalize the costs of repo-based financing to market stability.\textsuperscript{53} Indeed, many proposals would leave the safe harbors intact but use Dodd-Frank and related authority to monitor and mitigate systemic risk.

We support proposals for greater regulatory oversight of repo markets. But it is unwise to rely exclusively on federal regulators to mitigate systemic risk. Regulators are imperfect, as the recent crisis illustrates. And the current safe harbors make regulation harder and more complex by fostering shadow banking. A better approach, we think, is to narrow the repo safe harbors in a simple way that is (i) predictable, (ii) does not depend on the fallible discretion of regulators, and (iii) provides a back-stop that protects the financial system when federal regulators make mistakes. We want redundancy in systemic risk protection.

A. Narrow the Repo Safe Harbors

Policymakers can strike the right balance—protecting markets but preserving the credit-enhancing effects of repo-based financing—by narrowing the safe harbors to protect only repos involving highly liquid securities backed by the full faith and credit of the U.S. government ("FFC securities"), including Treasuries and some agency securities (e.g., those guaranteed by Ginnie Mae). This category amounts to about half of the outstanding securities in the repo market, so it is not small. Repos on other collateral—such as private mortgage-backed securities, equities, bonds, and agency securities that lack the backing of the United States' full faith and credit—should not receive safe harbor treatment.\textsuperscript{54}

The case for protecting repos on Treasuries and other FFC securities is straightforward. First, safe harbor protection is consistent with longstanding public policy fostering liquidity in the market for government securities. It is cheaper for the government to issue debt when the securities it issues can be readily repo-ed by investors.

Equally important, safe harbors for repos on FFC securities are unlikely to contribute to systemic risk. Recall that the safe harbors contribute to systemic risk by exposing failing institutions to runs and collateral fire sales. Although the potential for a run exists when a failing institution has entered safe-harbored

\textsuperscript{53} See the proposals listed at supra notes 4 and 5.

\textsuperscript{54} Here is a breakdown of the collateral backing the American repo market: U.S. Treasury securities (at 34.7% of the market) and full faith and credit obligations of U.S. agencies (5.9%) would remain safe harbored. Equities (at 4.5%), private mortgage-backed securities and collateralized mortgage obligations (at 3.9%), corporate bonds (at 3.5%), and a miscellaneous category (at 2.7%) would not be safe harbored. Of the government-sponsored mortgage-backed securities and collateralized mortgage obligations (at 45% of the entire repo market), approximately one-quarter were backed by the full faith and credit of the U.S. government (such as bonds guaranteed by Ginnie Mae), amounting to 11% of the total repo collateral; they would be safe harbored. Bonds guaranteed by Fannie Mae and Freddie Mac are not guaranteed by the full faith and credit of the United States. See US Repo Market Factsheet, SIFMA (June 27, 2012), available at http://www.sifma.org/research/item.aspx?id=8589939674.
repos, the risk of collateral fire sales is minimal when the collateral consists of FFC securities. These securities are nearly equivalent to cash, are widely traded, and—due to government backing—unlikely to lose their liquidity during crises. Indeed, this is a crucial distinction between repos on FFC securities and repos on any other asset: FFC securities tend to retain their liquidity in good times and bad.\textsuperscript{55} For other assets, liquidity is endogenous: The current liquidity of the asset is no guide to its future liquidity and its capacity to be sold quickly at long-run value in a crisis.

Safe harbors for repos on FFC securities are, therefore, unlikely to increase the risk or amplitude of market crises. The opposite is true for repos on other assets. Even if the assets are liquid today, in a normal economy, they may become highly illiquid in a crisis, thereby exacerbating market crises via the collateral channel. The history of mortgage-backed securities offers a case in point, as asset-backed securities performed poorly during the financial crisis.\textsuperscript{56}

A large class of Agency assets lacks FFC support but has implicit government backing, namely the mortgage securities backed by Fannie Mae and Freddie Mac, two government-sponsored entities. The empirical case for rolling back the safe harbor for repos of these agency-backed mortgage securities is closer than that for private mortgage-backed securities. During the financial crisis, these entities were put into a government-financed conservatorship and bailed out.\textsuperscript{57} Recent work by Begalle, Martin, McAndrews, and McLaughlin shows that agency-backed securities are less likely to retain their long-run value than Treasuries, which suggests that they should not receive the same safe-harbor treatment as Treasuries.\textsuperscript{58} The authors estimate the time needed to liquidate a typical large dealer's repo portfolio without affecting market price. Even during stable, non-crisis market conditions, Treasuries can be liquidated more quickly in much larger volume—nearly twice as much daily—than agency securities without affecting market prices. A typical large dealer would need more than three weeks to liquidate its portfolio of agency securities without a price impact—a time span similar to that for liquidating private securities without price impact. By contrast, the dealer could unload its Treasury portfolio in nine days. These comparisons are unfavorable to non-FFC agency securities during stable conditions. Worse yet, during a crisis, a flight-to-quality would widen the gap, as Treasuries become more desirable.\textsuperscript{59}

\textsuperscript{55} Even U.S. Treasury securities could become illiquid, but that illiquidity is likely to arise only when the U.S. government is insolvent. Were that to occur, systemic risk would be a problem with or without the safe harbors. The nation would be facing an economic crisis of such severity that safe harboring Treasuries would be a minor issue.

\textsuperscript{56} COPELAND, MARTIN & WALKER, supra note 47, at 32.


\textsuperscript{58} BEGALLE, MARTIN, McANDREWS & McLAUGHLIN, supra note 7, at 14–18.

\textsuperscript{59} Id. at 15–16 ("It is worth noting that these estimates are conservative. The assumption regarding the number of days to liquidate is for normal market conditions taking into account historical daily turnover in each asset class and is meant to avoid signaling effects. Under stressed market con-
Despite these projections, however, non-FFC agency securities did well during the recent crisis: neither their liquidity nor their pricing deteriorated substantially.\textsuperscript{60} This surprisingly robust performance was likely a product of massive government support to both the repo markets (about 40 percent of which is agency-backed)\textsuperscript{61} and the agencies themselves. Fannie and Freddie entered federal conservatorship and received about $187.4 billion in government support.\textsuperscript{62}

Agency-backed securities were, in retrospect, de facto FFC securities during the crisis. Indeed, the robust in-crisis performance of Agency securities might suggest that the repo safe harbor could be extended to both de jure FFC securities (e.g., Treasuries) and de facto FFC securities (e.g., agency-backed MBS) without increasing the risk or amplitude of market crises.

We disagree with that view. A security enjoys de facto FFC status when market participants anticipate government backing. But expectations about government support to financial markets can be erroneous, particularly because government support depends in part on political calculations in the executive branch and the Congress; the recent experience during the crisis created an anti-bailout perspective among many there. Indeed, during the crisis itself, many expected that Lehman Brothers would be bailed out, perhaps including Lehman executives; yet it was allowed, indeed encouraged, to file for bankruptcy. Put bluntly, de facto FFC securities might not be bailed out in a future crisis: the negative reaction to the 2008–2009 bailouts has been substantial.

Additionally, having a repo safe harbor for de facto FFC securities can damage the financial system: The existence of a repo safe harbor facilitates having these securities repo'ed in many financially important areas of the financial system, some of which can be fragile financial interconnections that can only exist with repo safe harbors. But repo'ing securities that cannot maintain their value and liquidity without government support can create more underlying financial fragility that, in a crisis, calls forth government support that would not otherwise be needed. Accordingly, our policy analysis is to consider the appropriateness of a repo safe harbor if the securities and their guaranteeing agencies were not bailed out. Without a bailout, agency securities lacking the government's full faith and credit would likely have suffered serious illiquidity, similar to that of private mortgage-backed securities. Their widespread liquidation would have


\textsuperscript{61.} And one-quarter of the agency securities here do receive the full faith and credit of the United States (the quarter guaranteed by Ginnie Mae), but are mixed in with the data on agency-backed securities' performance during the crisis.\textsuperscript{62.} See Office of Mgmt. & Budget, Exec. Office of the President, Budget of the United States Government, Fiscal Year 2015, Appendix: Government-Sponsored Enterprises 1–3 (2014) (describing total expenditures to Fannie and Freddie as $116.1 billion and $71.3 billion, respectively), available at http://www.whitehouse.gov/sites/default/files/omb/budget/fy2015/assets/gov.pdf.
further degraded collateral prices in the economy, heightening the very systemic risks that the safe harbors were intended to avoid.

* * *

The foregoing discussion addresses repos of securities that are currently liquid but might be illiquid in a crisis. But today's safe harbors also protect repos of assets that are currently illiquid, even during normal market conditions. Thanks to the safe harbors, these repos allow distressed institutions to increase in size and leverage, as noted above. In the absence of safe harbor treatment, the institutions would be limited to ordinary secured debt financing to finance their growth. To be sure, this "ordinary" secured debt might also be very short-term financing. But even if it is just as short term as repo financing, this "ordinary" secured debt is subject to ordinary bankruptcy rules, such as the automatic stay, which prevent a value-destroying run on the debtor, fire sales of its collateral, and, if the financial stress leads to a system-wide crisis, the potential degradation of system-wide liquidity if the sales put excessive downward pressure on the collateral's price.

The repo safe harbors should therefore be limited to agreements collateralized by securities issued by the U.S. government or otherwise backed by the government's full faith and credit. Proposed basic statutory amendments are set out in the appendix. This rollback tracks the definition of "repurchase agreement" as originally enacted in 1984. Our conclusion rests on the available empirical evidence, the logic of the relationships, and the experience during the financial crisis.63

B. Substitution Effects and the Other Safe Harbors

If Congress rolls back the repo safe harbor as we recommend, markets will adjust. The price for repo'ing a mortgage-backed security, for example, will rise relative to other financing channels. We anticipate several kinds of responses, some positive, some benign, and some pernicious.

A positive, or at least benign, response is that financial institutions may reduce their reliance on repo-based financing and increase their use of less run-prone debt. In the absence of safe-harbor protection, repo lenders will demand higher haircuts because the underlying collateral is less liquid. Counterparties will, at the margin, more carefully assess with whom they deal and will seek more collateral. Repo-based financing will, therefore, be more expensive and less attractive. We may therefore see substitution toward more traditional secured debt financing. This might include short-term secured debt and longer-term debt. Longer-term debt should provide more stable financing.

63. We do not address considerations beyond those relating to financial stability and systemic risk. Other opponents of safe harbors may point to rapid close-outs as impeding reorganization of industrial firms, which they probably do. But because that process lacks the potential for knock-on effects to the entire economy, we are unsure of the correct policy. If the safe-harbor debts are a small part of an industrial firm's capital structure (in contrast to the one-third or more that it constituted for Lehman and other major financial firms), refinancing via section 364 debtor-in-possession prioritized financing should be possible.
A less attractive response is that counterparties may try to obtain safe-harbor protection for repos using the derivatives safe harbors. We have in this paper focused on the repo safe harbor, but comparable protection is available to counterparties to swaps, forwards, options, and other derivative contracts, including combinations of these contracts. If a mortgage-backed repo does not receive protection under the repo safe harbors, counterparties could construct a synthetic repo that has the same economics as a mortgage-backed repo but receives protection under the safe harbors for swap agreements.64

This possibility presents a statutory drafting problem: the drafters must close end-run “loopholes” by narrowing the derivatives safe harbors at the same time they narrow the repo safe harbors. That task is doable, but drafting is rarely perfect, and the ingenuity of financial market players and their lawyers is great.

An even less attractive response is that repo-based financing might migrate from smaller, systemically benign institutions to the biggest, systemically important financial institutions. That would tend to occur if the largest too-big-to-fail financial institutions continue to be too-big-to-fail, inducing non-safe-harbored repo investors in the mortgage-backed sector to protect themselves by migrating further to too-big-to-fail institutions. If that is the substitution effect, then rolling back the repo safe harbors will not have made the financial system much safer than before.65

Lastly, some of the currently existing short-term repo channels are set up in ways that can only handle short-term finance. These channels cannot and will not shift to being providers of long-term debt. This inelasticity may well mean that the market adjustments from rolling back the repo safe harbors will not be immediate. But a normal economic expectation would be that the costs of using this channel will rise, while the costs of other channels will fall, and over time markets will adjust away from the more expensive channel to the less expensive one.

While we cannot assuredly predict where the substitution will occur, and when it will happen, we can state that the current broad safe harbors did not work well during the financial crisis. They had encouraged the growth of investment channels that proved to be highly unstable and they failed to contain the crisis when it erupted. In our view, our financial system could not do much worse than have the weak, run-prone structures and incentives that we have now and that the broad safe harbors promoted and still promote. The downside

64. For a description of synthetic repos, see MOORAD CHOUHRY, THE REPO HANDBOOK 192-95 (2002). One can conceptualize this as follows: A counterparty buys the security from the debtor under one contract and simultaneously enters a total return swap with the debtor under a separate and formally distinct contract. The total return swap requires the debtor to make periodic interest payments and requires the counterparty to pay any changes in the value of the securities. When the swap matures, the counterparty will sell the security back to the debtor. Through these three transactions, the parties replicate a repo. Each transaction—the two securities contracts and the swap—is safe harbored by the Code.

65. Another possibility is that, in the absence of safe-harbor protection, repo counterparties insist that their bank counterparties be well-capitalized, with capital levels even greater than those required by regulators. This would be a systemically positive effect.
of malign substitution from rollback is possible but seems limited, leaving the major issue, in our judgment, only the size and breadth of the improvement.

Moreover, we repeat the point we have made earlier: in general those drafting the Bankruptcy Code should leave monetary and financial policy to the institutions designated to do so. The mortgage-backed repo safe harbors are efforts at macro financial policy, not bankruptcy policy.66

C. REDUCE BANKRUPTCY COSTS FOR FINANCIAL CONTRACT COUNTERPARTIES

The demand for safe-harborred repos derives partly from inefficiencies in the Bankruptcy Code.67 Without the safe harbors, it is said, counterparties would be exposed indefinitely to interest rate and spread risk, affecting their capital and liquidity, and would be unable to effectively hedge their risk.

These are important concerns, but they should not be overstated. In the absence of safe harbor treatment, repos are likely to be treated as secured loans, not executory contracts, by bankruptcy courts. If the status of repos as secured loans is unclear, the Code should be amended to make this clear. Like any secured loan, the repo contract should terminate upon the bankruptcy filing and the counterparty's secured claim set equal to the value of the underlying collateral on the filing date.68 Counterparties should face the same risks and have the same protections as any secured lender in bankruptcy: The value of the collateral may vary over time and courts must adequately protect the secured party from deterioration in value.69

66. Bankruptcy policymakers should, however, be aware of how bankruptcy policy can tilt financing away from the stable long term to the less stable short term. Better attention to how interest is paid in bankruptcy, or not paid, on long-term undersecured debt and the adequacy of protection could strengthen long-term financing channels.

67. See, e.g., Grosshandler, supra note 1, at 8 ("Absent safe-harbor protection, counterparties would be subject to the Bankruptcy Code's automatic stay and assumption/rejection powers, which would subject Safe Harbored Contract counterparties to a variety of risks. Unlike other contracts, the value of Safe Harbored Contacts typically can change rapidly based on the fluctuating value of the underlying assets or collateral, prevailing market conditions and other factors. The inability of counterparties to terminate such contracts and foreclose on collateral exposes them to risks that cannot be hedged effectively. If the debtor is given the right to assume or reject Safe Harbored Contracts in bankruptcy, this effectively gives the debtor an indefinite option to perform or terminate the contract, making it impossible to effectively hedge the related risks in an adequate manner. It could also potentially give the debtor the right to 'cherry pick' between contracts, exacerbating losses to creditors. Although the Bankruptcy Code provides protections to secured creditors, the mechanisms are not timely enough and are too cumbersome to obtain to effectively protect counterparties under volatile Safe Harbored Contracts, especially on a large scale, such as during the failure of a systemically important financial institution.").

68. See Skeel & Jackson, supra note 5, at 173–80. Indeed, the predecessor to the mortgage repo was the warehouse secured loan. See supra Part II.B.1.

69. In the unlikely event that a repo were treated as an executory contract, the counterparty would face similar challenges as those raised with a secured loan. For example, under section 365(d)(2) of the Code, the trustee in a Chapter 11 case has until confirmation of a plan to assume or reject an executory contract. But the statute also provides that "the court, on the request of any party to such contract or lease, may order the trustee to determine within a specified period of time whether to assume or reject such contract or lease." 11 U.S.C. § 365(d)(2) (2012).
True, some collateral, such as mortgage-backed securities, is more volatile than the collateral underlying some secured loans. Safe-harbor proponents indicate that this volatility justifies exemption from the normal workings of bankruptcy. But the very reason asserted for bankruptcy exemption—high volatility—is a reason that should make Congress and policymakers worry that the exemption unwisely subjects the financial system to greater risk. We have that concern, and policymakers should as well.

Some of the volatility problem comes from the likelihood that the adequacy of bankruptcy protection may be adequate in form but inadequate in financial reality. Interest rate shifts may change the value of the underlying collateral and interest is not necessarily available even to secured lenders. A long stay might be costly to non-safe-harbored repo debt, as it can be for many secured creditors. This difficulty might warrant amendments to the Bankruptcy Code that better protects the counterparty's interest in the collateral, as valued on the filing date. Additionally, in some cases the collateral will be assets that are unnecessary to an effective reorganization of the debtor, warranting a lift-stay order, particularly in cases of operating companies using repo.

Lastly, proponents of wide safe harbors worry about a counterparty needing liquidity that is tied up in a bankruptcy proceeding. Above we addressed such concerns: since all creditors have such worries, this is more a reason to safe harbor all debt from bankruptcy. But another market feature blunts the strength of this problem. A counterparty with an intense need for the cash—one that cannot wait out the bankruptcy process—has modern market alternatives. A wide and deep market of claims trading has arisen in recent years in bankruptcy. A liquidity-constrained counterparty can sell the claim for cash to a financier that can wait out the bankruptcy process, in a way that was much harder to accomplish decades ago. We do not assert that the market for claims trading is perfect, but there is one and it blunts the force of the liquidity argument.

IV. POTENTIAL CRITIQUES

Opponents of reform often make the following arguments in favor of retaining the status quo:

(1) The safe harbors prevented a systemic meltdown following the Lehman bankruptcy.
Little would be gained by narrowing the repo safe harbors because the risk-taking activities of systemically important institutions are now constrained under recently enacted laws and regulations.\textsuperscript{74}

Our proposal will reduce the liquidity of mortgage-related securities and thereby undermine long-standing federal policy supporting the housing market.

There is a worldwide demand for money-like obligations that monetary policymakers need to meet. Wide repo safe harbors facilitate meeting that demand.

We have addressed some of these issues obliquely above. We address each directly now.

A. LESSONS FROM LEHMAN

Opponents of reform often argue that the safe harbors mitigated the market impact of Lehman's failure. In particular, the safe harbors prevented Lehman's failure from destabilizing its counterparties in the dealer market. There are two problems with this argument. First, it is a selective recounting of developments in financial markets after Lehman's collapse. Most obviously, it ignores the subsequent failure of AIG, the failure of the Reserve Fund, the needed guarantee of the entire money market, and the disarray and freezing of many financial channels. There was a major financial crisis and Lehman's collapse is generally thought to have deepened it.

The more important problem with the argument—that the safe harbors saved Lehman's dealer counterparties—is that it is probably incorrect.\textsuperscript{75} Lehman and its counterparties required $28 billion in Fed assistance to stabilize the Lehman repo book when it filed, the Federal Reserve reports.\textsuperscript{76} The safe harbors were, terminate, net and exercise rights against collateral, with only approximately 3% of Lehman's derivatives book remaining outstanding after three months following its bankruptcy petition. If these counterparties were not protected by the safe harbors, these positions would have been indefinitely frozen, causing potentially catastrophic capital and liquidity implications for counterparties in addition to any losses under the contracts. While subsequent failures (and near-failures) occurred during the financial crisis, they had other causes—mainly losses caused by outsized exposures to the subprime mortgage market and the seizure of the inter-bank credit market. The effects of these dynamics were exacerbated by the political uncertainty caused by letting Lehman fail, while shoring up other institutions, which led to or exacerbated runs on not just broker-dealers, but on insured depository institutions (the first time runs had occurred since the Great Depression).

74. Id. at 13-14 ("Take for example the criticism that the safe harbor for repurchase agreements has created an incentive for large financial institutions to rely excessively on short-term repurchase agreements rather than on other forms of funding. The banking and securities regulators are uniquely positioned to address any such issues. In fact, regulators have already taken steps to reduce reliance on short-term funding through tougher capital and liquidity requirements, and plan further action. These rules address specific concerns about the funding profile of major financial institutions without increasing risks to counterparties that would arise if the safe harbors were instead narrowed or eliminated.").


76. Id. at 56.
contrary to the opponents' recounting, insufficient to stabilize even Lehman's own repo book. And worse:

[Other dealers in the tri-party repo market] experienced stress during the following days [after Lehman filed]. . . . Stress in this market would [apparently] have been considerably worse, absent the exceptional policy responses that took place, including the presence of the [Fed's Primary Dealer Credit Facility].

The Primary Dealer Credit Facility was a credit facility that the Federal Reserve created to backstop the tri-party repo market and illiquid collateral in that repo market (which we argue here should not benefit from the safe harbor). The Lehman Bankruptcy Examiner's Report recounts the importance of the Fed's Primary Dealer Credit Facility in steadying repo markets around the time of Lehman's bankruptcy. The Fed's facility was not in use just prior to the Lehman bankruptcy in mid-September; by October 1—two weeks after Lehman filed—the facility had seen repo dealers draw $148 billion on it.

In other words, even the safe-harbor repo market needed massive government support and could not rely on the safe harbors to achieve stability. This result is hard to square with the view that the safe harbors prevented further failure after Lehman went down.

B. POST-CRISIS LAWS AND REGULATIONS

Our proposed reform—narrowing the repo safe harbors to approximately their 1984 extent—could be said to be "fighting yesterday's war." In a post-Dodd-Frank world, the costs of the safe harbors—especially their systemic risk effects—are now addressed and minimized by federal regulators. Indeed, any modification of the Bankruptcy Code's safe harbors would simply complicate and undermine the coordinated efforts of federal regulators and their counterparts around the world.

This is an important argument, and would be particularly powerful if we were advocating reforms designed to be primary tools in mitigating systemic risk. That is indeed a job that should be left in the hands of regulators. But we are not proposing that the Bankruptcy Code play a larger or different role in regulating systemic risk. We are instead arguing that the Code should get out of the business of regulating systemic risk. For over twenty years, Congress has added an expanding

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77. Id. at 61.
78. On September 14, 2008, fear that a Lehman failure would "put other financial institutions at risk" led the Fed to expand the Primary Dealer Credit Facility. Adrian, Burke & McAndrews, supra note 38, at 3. "The facility proved to be a critical recourse for primary dealers at the time of the Lehman Brothers bankruptcy." Id. at 9.
array of safe harbor provisions to the Bankruptcy Code with the stated intent of minimizing the risk of systemic distress. We think this is a mistake, especially with respect to repos, because the available evidence suggests that the safe harbors make systemic crises more likely and more severe.

More importantly, our proposal complements current efforts by federal regulators to limit the risk-taking of systemically important firms. Despite their best efforts, regulators may make mistakes and a systemically important institution may collapse (this is precisely why Congress adopted Title II of Dodd-Frank). The broad safe harbors we now have magnify the cost of regulatory error. They allow a failing institution to become more leveraged, more dependent on runnable short-term debt, and more likely to need a bailout when it collapses. Thus, our proposal—to narrow the repo safe harbors—helps reduce the cost of regulator error. Our proposal builds redundancy into the financial regulatory system.

The importance of this redundancy should not be overlooked. Regulators responsible for financial safety regret that they lack authority to handle broad aspects of systemic risk residing in the so-called “shadow banking” system. If broad portions of the repo market move out of the banking system, as some believe safety regulation for banking might induce, then the systemic costs of the Bankruptcy Code’s subsidy to short-term repo financing could rise, to the discredit of the bankruptcy system. While riskier repo transactions declined in the wake of the financial crisis, they have climbed back up since and Federal Reserve regulators continue in 2014 to worry that several Wall Street firms are seriously vulnerable to a repo run. Narrowing the repo safe harbors to Treasuries helps to keep the shadow banking system, which is less susceptible now to direct regulation, from overly relying on mortgage-backed repos.

Moreover, Congress, via Dodd-Frank, expected bankruptcy to play an important role in resolving distress of systemically important financial institutions. The

81. Tarullo, supra note 46 (Federal Reserve governor concludes that “completion of this task [of promoting financial safety] will require a more comprehensive set of measures, . . . some of which must cover financial actors not subject to prudential regulatory oversight.”). Moreover, “[w]e would do the American public a fundamental disservice were we to declare victory without tackling the structural weaknesses of short-term wholesale funding markets,” Tarullo had previously concluded. Peter Eavis, A New Fed Thought for 'Too Big to Fail' Banks: Shrink Them, N.Y. TIMES DEALBOOK (May 3, 2013, 1:32 PM), http://dealbook.nytimes.com/2013/05/03/fed-governor-pushes-for-measure-aimed-at-strengthening-large-banks/.


resolution planning process required in Dodd-Frank for financial institutions requires that the institutions plan for resolution under the Bankruptcy Code if they are eligible to file for bankruptcy. Title II of Dodd-Frank and many of its key regulatory interpreters expect bankruptcy to be the first line of resolution defense, with the expanded Dodd-Frank processes kicking in only if bankruptcy fails.85

C. EFFECTS ON THE HOUSING MARKET

Our proposal would eliminate safe harbor protection for repos on mortgages and mortgage-backed securities. These assets will become less liquid, the supply of credit to the housing market could decline, and it could become harder for potential homeowners to obtain mortgages.

We offer no view here about the value of subsidizing mortgages. This is a matter for policymakers in other arenas to decide. But the American housing market was robust and mortgages were common before the repo safe harbor for mortgage-backed securities became explicitly available in 2005. The benefit to housing could not have been fundamental; the impact in facilitating the financial crisis was, however, substantial. If policymakers nevertheless decide that the safe-harbor benefit to liquidity of mortgage-backed securities is worth continuing, despite its impact in the financial crisis, then it should not move forward via a type of “off-budget” financing by which major risks from their being safe-harbored are borne by the U.S. Treasury, taxpayers, and the American economy but are not otherwise accounted for. If mortgage-backed securities are to get the benefit of the safe harbors, then they should be backed by the full faith and credit of the United States, a result that policymakers and experts have recommended anyway as superior to the current implicit guarantees of government-backed, but not government-guaranteed, entities and their securities.86


86. See Nick Timiraos, What Can Take the Place of Fannie and Freddie?, WALL ST. J. (Mar. 15, 2014, 5:00 AM EST), http://blogs.wsj.com/economics/2014/03/15/what-can-take-the-place-of-fannie-and-freddie/tab/print/. The academic, industry, and perhaps regulatory consensus proposal is reported to be to make the implied guarantee explicit, backed by the federal government’s full faith and credit.
D. LIQUIDITY IN MONEY MARKETS

Repos are an important part of the money market and the safe harbors are generally thought to play an important role in supporting the use of repos in money markets. Our proposal would affect liquidity in money markets by reducing the range of assets subject to repo safe-harbor protection. This might even lead to a "collateral shortage": Market participants may be unable to quickly access collateral that is subject to safe-harbor protection.

These are important downsides of our proposal. Outside of a crisis, the safe harbors increase asset liquidity, promote liquidity in money markets, and expand access to credit. In a crisis, however, the safe harbors have opposite effects. A balance must be struck between (i) rules that foster the creation of money-like claims and (ii) rules that protect financial markets from destabilizing runs in systemically important institutions. This is obvious; there is an academic consensus that such a balance must be struck. Although there are many ways to strike this balance, our proposal is a simple way to achieve it.

Our proposal will not prevent the financial system from creating money-like claims. First off, the Treasury market is itself broad and, in our view, should continue to have safe-harbor repos. Second, a repo rollback will shift creation of these claims from weakly capitalized financial entities to well-capitalized ones. The repo safe harbors are intrinsic to modern private money creation primarily because they protect counterparties of weakly capitalized, insolvency-prone financial entities. The safe harbors are unimportant if the entity seeking to create near-money is so well capitalized that its strength and survivability are unquestioned. Indeed, private money creation has a long history, and for most of that history private money was created without repo safe harbors, which are a modern phenomenon, dating from the 1980s. Narrow safe harbors, such as those that we recommend, would provide private competitive incentives for some financial entities to move toward such ultra-safe structures, so that they could profit from issuing more near-money, which weakly capitalized financially entities could not. Regulators could analogously modulate safety-enhancing financial regulation with private money creation in mind.

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88. See, e.g., Gorton & Metrick, supra note 5, at 284 ("The rise of shadow banking was facilitated by a demand-driven expansion in the bankruptcy safe harbor for repos.").
89. Our proposal might reduce the extent to which repo'd assets are rehypothecated. We see this as a virtue, however, because it should reduce financial interconnectedness involving weakened securities—a problem during the financial crisis.
91. Perotti, supra note 18.
If our proposal has a large adverse effect on liquidity in money markets, and if federal regulators believe that the benefits of greater liquidity in these markets outweigh the potential systemic risks, regulators can expand the scope of the repo safe harbor in a simple way: The federal government can offer full faith and credit backing to a broader range of securities.

In other words, if there is a collateral shortage in money markets, or if regulatory authorities want more money-like channels with unimpeachable collateral to be built, public authorities ought to push for appropriate private ordering or for government full faith and credit backing. To do otherwise is to ask bankruptcy to do what it cannot. If the collateral that provides the foundation to a money channel cannot retain its long-run value in a crisis, the legal framework has not created a solid money channel. Instead it has created a money channel that can operate during stable economic times but that in a financial crisis cracks, constricts, and collapses. It fails during a financial crisis because the foundational collateral does not retain its long-run value. But if important financial institutions rely on this shaky channel, then when it cracks, government authorities are pressed to conclude that they must support the channel to prevent its full collapse. Government authorities face the choice of propping up the channel and bailing out its participants, or allowing the real economy to suffer.

CONCLUSION

The repo safe harbors are too wide and should be narrowed. The safe harbors should be limited to United States Treasury and similar securities with the government's full faith and credit backing them up. They should not encompass private mortgage-backed securities.

The safe harbors depart sharply from standard bankruptcy practice, effectively putting a large class of creditors outside the normal operation of the Code, by exempting them from the automatic stay, the bankruptcy court's avoidance powers, the normal scope of setoff, and the normal treatment of *ipso facto* clauses. These departures demand strong justification, but there is no strong justification for mortgage-backed repos. If the safe harbors truly supported systemic financial safety, they might well be justified. But the safe harbors do no such thing. They

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93. The view that we need more near-money channels is not unanimous. Jeremy Stein, prior to joining the Federal Reserve, suggested that the greater problem may be the excessive manufacture of near-money obligations. Jeremy C. Stein, *Monetary Policy as Financial Stability Regulation*, 127 Q.J. Econ. 57 (2012).

94. Consider this description:

Prior to the ... crisis there was a credit boom ... in housing. The mortgages were typically securitized into bonds that were used as collateral in repo. During the credit boom, over 1996–2007, ... mortgage-backed securities grew by 1,691 percent. When house prices started to decline these mortgage-backed securities became questionable, leading to the financial crisis, when the short-term debt was not renewed, leading to almost a complete collapse in the volume of collateral. ... The decline in house prices led lenders to question the value of the collateral in mortgage-backed bonds, as well as other securitizations.

may well indeed do the opposite by encouraging short-term financing at the expense of stable long-term financing, by facilitating more runnable debt, and by facilitating runs—and especially destructive ones—when a financial firm weakens.

The departure from core bankruptcy principles—a recent one, beginning only a few decades ago and expanding substantially as recently as 2005 and 2006—is unjustified and should be ended.
APPENDIX: STATUTORY PROPOSAL

Amend section 101(47) to read approximately as it did in 1984:

101(47): "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, if backed by the full faith and credit 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;

Additionally, the definition of "securities contract" would need to be narrowed in order to prevent it from safe harboring repurchase agreements that fall outside the scope of the narrowed repo safe harbor. For example, a securities contract to purchase a security could be paired with a formally separate securities contract to sell that security back at a later time. That pairing could functionally substitute for a repo. Hence, section 741(7), which safe harbors certain securities transactions, should also be narrowed to eliminate transactions that are functionally equivalent to repos. Other conforming changes would likely be needed.