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## DERIVATIVES MARKETS IN BANKRUPTCY

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## **Abstract**

*By treating derivatives and financial repurchase agreements much more favorably than it treats other financial vehicles, American bankruptcy law subsidizes these arrangements relative to other financing channels. By subsidizing them, the rules weaken market discipline during ordinary financial times in ways that can leave financial markets weaker than they would be otherwise, thereby exacerbating financial failure during an economic downturn or financial crisis emanating from other difficulties, such as an unexpectedly weakened housing and mortgage market in 2007 and 2008. Moreover, and perhaps unnoticed, because the superpriorities in the Bankruptcy Code are available only for short-term financing arrangements, they thereby favor short-term financing arrangements over more stable longer term arrangements. While proponents of superpriority justify the superpriorities as reducing contagion, there's good reason to think that they in fact do not reduce contagion meaningfully, did not reduce it in the recent financial crisis, but instead contribute to runs and weaken market discipline. A basic application of the Modigliani-Miller framework suggests that the risks policymakers might hope the favored treatment would eliminate are principally shifted from inside the derivatives and repurchase agreement markets to creditors who are outside that market. The most important outside creditor is the United States, as de jure or de facto guarantor of too-big-to-fail financial institutions.*



# DERIVATIVES MARKETS IN BANKRUPTCY

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# Derivatives Markets in Bankruptcy

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## INTRODUCTION

American bankruptcy law is reorganization-oriented, not liquidation-oriented. Chapter 11 bars bankrupt debtors from immediately repaying their creditors, so that the bankrupt firm can reorganize without creditors shredding the bankrupt's business. There are, however, exceptions to Chapter 11's reorganization orientation, with one of the most important being that accorded to the bankrupt's derivatives and financial repurchase (known to all involved as "repo") counterparties, who, unlike typical creditors, can seize and liquidate collateral, net out gains and losses, terminate their contracts with the bankrupt, and keep both preferential eve-of-bankruptcy payments and fraudulent conveyances they obtained from the debtor, which other creditors would have to return to the bankrupt.

Their power under bankruptcy law to leap-frog to obtain immediate repayment, in ways that even ordinary secured creditors cannot, reduces their pre-bankruptcy incentives for market discipline in dealing with counterparties. Because the derivatives and repo players need not be as concerned about a counterparty's failure as with an ordinary debtor's failure, they have less incentive to ration their dealings with derivatives and repo debtors as carefully. If they were made to account for repo and derivatives counterparty risk in ways similar to how they must account for other counterparty risk, they would be more likely to insist that there be stronger counterparties than otherwise on the other side of their derivatives bets and they would substitute at the margin away from short-term derivatives and repo financing into more stable financing, thereby insisting for their own good on strengthening the financial system. Without the strong bankruptcy protection they have for derivatives and repo contracts, they would substitute some of their investments away into alternatives.

True, if derivatives and repo counterparties bear less risk, as they do, due to the Bankruptcy Code's favoritism, then other creditors that are poorly prioritized bear more risk and thus have more incentive for market discipline. But the other creditors — such as the United States of America as guarantor of too-big-to-fail institutions — are poorly positioned contractually to consistently anticipate problems and to react quickly and well when problems arise anyway. Bankruptcy policy should harness private incentives for market discipline by cutting back on the large advantages that Chapter 11 and related insolvency legislation bestow on these investment channels.

When we subsidize derivatives and repo via bankruptcy benefits unavailable to other creditors, we get more of that subsidized activity than we otherwise would.

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\* Professor, Harvard Law School. An earlier version of the argument I present here appeared in more extensive form in *Stanford Law Review* (2011), 63: 539-590, as *The Derivative Market's Payments Priorities as Financial Crisis Accelerator*.



Bringing these bankruptcy benefits back down toward the level accorded most creditors would induce the derivatives and repo markets to better recognize the risks of counterparty financial failure, which in turn should dampen the possibility of another AIG/Bear/Lehman financial melt-down, such as that which occurred in 2007 and 2008. American and world-wide financial stability would be enhanced. Regulatory action could move the system in that direction, but has not yet strongly or even persistently done so.

## **I. DERIVATIVES PRIORITIES AND THE FINANCIAL CRISIS**

The AIG, Bear Stearns, and Lehman Brothers failures were at the heart of the 2008-2009 financial crisis and economic downturn. Some said their failure sparked a financial panic and exacerbated the consequent economic downturn. Some said they transmitted financial troubles emanating elsewhere in the economy — largely in the subprime mortgage market — in a way that exacerbated financial damage.<sup>1</sup> Quite plausibly, the latter scenario was not peripheral, with financial weakness in the housing and mortgage markets then affecting financial institutions that, due to their derivatives and repo market exposures, were less able to sail through the financial storm than they otherwise would have been.

The Bankruptcy Code's favored treatment of these firms' massive derivatives and financial repurchase contracts facilitated these firms' failures, by undermining market discipline in both the derivatives and repurchase markets in the years before these firms failed. It did so by sapping the failed firms' counterparties' incentives to account well for counterparty risk — the risk that their financial trading partner would fail (as AIG, Bear, and Lehman eventually did). Policymakers at the highest levels expected private monitoring to substitute for public monitoring, apparently unaware that bankruptcy rules reduced those private incentives. Alan Greenspan (2003), who chaired the Federal Reserve, extolled the derivatives players'

strong incentives to monitor and control [counterparty risk]. ... [P]rudent regulation is supplied by the market through counterparty evaluation and monitoring rather than by authorities.... Private regulation generally has proved far better at constraining excessive risk-taking than has government regulation.

As late as 2008, Greenspan praised "counterparties' surveillance" as "the first and most effective line of defense against fraud and insolvency." "JP Morgan," he said, "thoroughly scrutinizes the balance sheet of Merrill Lynch before it lends. It does not look to the SEC to verify Merrill's solvency." Greenspan (2008: p. 257). We now know that such scrutiny was less than thorough and, in the end, the financial sector relied on the government for more than just verifying counterparty solvency, obtaining the Federal Reserve's and U.S. Treasury's cash to bail out the seriously insolvent. My view instead is that bankruptcy priority discourages such counterparty surveillance in the derivatives and repo markets, because the stronger counterparties know that they typically will be paid even if their derivatives or repo counterparty fails. Greenspan's

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<sup>1</sup> Compare Ferguson & Johnson (2010) with Cochrane & Zingales (2009). Cf. Taylor (2009).

judgment that market discipline could help in these markets is appropriate, but the Code's superpriorities for derivatives and repo contracts disincentive market discipline.

Were the Bankruptcy Code superpriorities narrower, the failed firms' financial trading partners would have anticipated that they might not be fully paid if weak counterparties failed. Understanding this, they would have been further incentivized to lower their exposure to a potential failure of Lehman, AIG, or Bear. Were the superpriorities not in the Code, each failed firm would itself have been incentivized to substitute away from risky, often overnight, financing and toward a stronger balance sheet, to better attract trading partners. Were the superpriorities not in the Code, the three firms' counterparties would have had reason to substitute away from some trades with the failed firms, into trades with the next tier of financial firms. Together, those results would have made each of these three firms less financially central and less interconnected. They would likely have had less superpriority debt. The financial system would have been more resilient.

These bankruptcy-based problems are not small. When Bear failed, a quarter of its capital came from the "repo" market via short-term, often overnight borrowings, amounting to eight times in capital at risk.<sup>2</sup> Without the Code's priorities, such a precarious capital structure would not have been viable. When AIG failed, its excessive credit default derivatives exposure destabilized it further. Without the Code's priorities for AIG's derivatives-trading partners, such a precarious position for AIG would not have been so easily viable. Without the Code's priorities, they would have had reason to worry earlier about AIG's potential precariousness and potential to fail to make good on its derivatives obligations.

That is the downside of favoring the derivatives and repo markets in bankruptcy. But risk-free investments with super-high bankruptcy priorities have major efficiency potential. Superpriority investment channels can lower information and negotiation costs for lenders and borrowers, facilitating financing flows that otherwise would not occur. Such efficient flows, if they could proceed without imposing costs on other parties or the financial system, deserve a supportive legal framework. Transferring risk via derivatives with minimal need to consider counterparty risk has similar efficiency benefits.

The problem, though, is that the major superpriority vehicles now come bundled with systemically dangerous government backing, because disproportionately it's been systemically-central institutions that use one side or the other of the bankruptcy-safe package. If we can separate efficient flows from systemically-dangerous flows — and then allow the first, while restricting the second — we could strengthen finance in two dimensions. But if we cannot separate the efficient from the dangerous, we need to choose. Given our recent poor experience in 2007 and 2008, the best choice is to strengthen the system in the more important dimension of systemic stability. To do so, we will need to sharply cut back the priority package.

Overall, these are not just local financial structures that unfortunately failed: When the financial crisis began in June 2007, the United States had \$2.5 trillion in

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<sup>2</sup> Bear Stearns, Form 10-Q (Feb. 29, 2008).

overnight repos, while the aggregate insured bank deposits in the United States were only twice as much. Just one type of derivative market — the interest rate swap — grew to more than \$400 trillion by December 2008, with \$4 trillion of collateral backing up the derivatives market overall.<sup>3</sup> ISDA (2009).

**FIGURE 1. GROWTH IN THE MARKETS FOR INTEREST RATE DERIVATIVES, COMPARED WITH GROWTH IN THE MARKET FOR ALL BUSINESS DEBT, 1994-2009<sup>4</sup>**

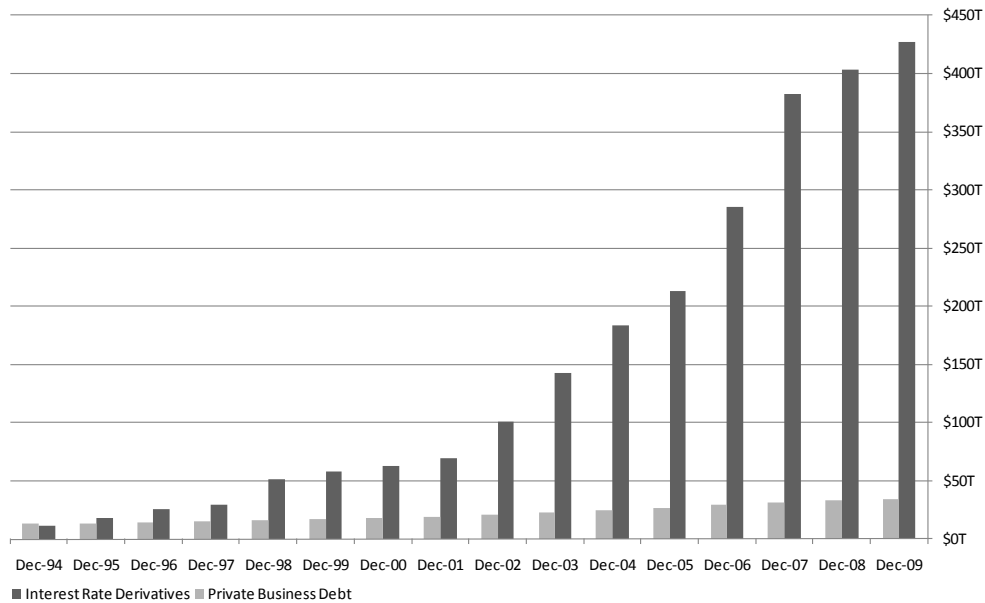


Figure 1 illustrates the market’s explosive growth in the dozen years preceding the financial crisis. In 1994, the private business debt and interest rate derivatives markets were about the same size, at \$13 trillion for the first and \$11 trillion for the second. In the subsequent 15 years, the business debt market tripled in size to \$34 trillion, while the interest rate derivatives markets increased nearly 40-fold to \$430 trillion. Combine the overnight repo market with the collateralized portion of the derivatives markets and we have a financial market *bigger* than the FDIC-insured banking system. If there’s a failure in these markets, the first set of governing rules come from the Bankruptcy Code. Academic supporters of the derivatives and repo markets indicate that these markets’ growth would not have been possible without the

<sup>3</sup> In an interest swap, one party trades a floating interest rate for a fixed one on, say, \$100 million of debt that neither party has borrowed or lent. The \$100 million “notional” amount is often reported as the transaction’s size — with that notional amount totaling \$400 trillion at year-end 2008. But it’s the smaller interest payment obligation that is being swapped and the collateral transferred is even smaller. That lower collateral amount goes into the text’s still-big \$4 trillion number.

<sup>4</sup> Sources: For derivatives’ growth, Int’l Swap and Derivatives Ass’n (2010). For private business debt growth: Federal Reserve System (2010).

bankruptcy safe harbors. Gorton & Metrick (2010: p. 3). Those safe harbors can be viewed less neutrally, as I do here, as subsidies at the expense of other creditors.

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In the next few pages, in Part II, I describe the counterparties' Code-based advantages. Although several are conceptually sound, most go far beyond wise bankruptcy and financial policy. In Part III, I show how the Code's advantages weaken counterparties' incentives for market discipline. The Code thereby discourages financial resiliency. Better bankruptcy law could create better incentives than it does now for counterparties to more efficiently structure their trillion-dollar derivatives and repo books so as to *avoid* an eventual counterparty collapse, rather than to avoid the *consequences* of an actual collapse. This lost potential for enhanced market discipline is where, I argue, the central bankruptcy priority costs of the derivatives and repo markets lie.

Then, in Part IV, I apply Modigliani-Miller's famous irrelevance hypothesis to show how the bankruptcy rules shift risks from inside the derivatives and repo markets to outside it. Although creditors' lawyers here often like to think of the structure as reducing risk, and it does reduce it for the immediate parties, it does not necessarily reduce it system-wide. Rather, Code priorities that *reduce* the derivatives counterparties' risks and monitoring incentives thereby *raise* risks that the financial firm's other creditors face. Risk is transferred, not eliminated.

Conceptually, those other creditors can reduce their exposure to a risky debtor, raise their prices, or monitor more closely. But the relevant players here are not always the best informed and best skilled at reducing resulting risks because they often are not themselves derivatives and repo professionals. The largest affected creditor is the United States as de facto guarantor of weak, too-big-to-fail financial debtors. But the United States has no contract, unless we conceptualize the Bankruptcy Code rules as its de facto contract. If we do so, that contract needs to be revised going forward.

In Part V, I examine the core arguments favoring derivatives and repo priorities, as well as glance at some of the major recent regulatory reactions. Although several bankruptcy advantages for each instrument are functional and ought to be kept, the full range is far too broad. In particular, I examine the contagion argument again, and point to two negative, perhaps serious, macro economic implications of derivatives priorities.

\* \* \*

Overall, the Bankruptcy Code's safe-harbor, superpriorities for derivatives and repurchase agreements are ill conceived. Not only do the provisions facilitate runs on financial institutions during financial crises, they also seriously weaken counterparties' ex ante incentives for financial stability. The Code priorities decrease the derivatives players' ex ante monitoring incentives and decrease their incentives to use stronger financing channels. If these markets lacked their priorities, one should ordinarily expect players to substitute into other financing channels.

The Code thereby encourages risky, knife's edge financing, which, when pursued in financially central firms, transfers risk to the United States as the ultimate

guarantor of the key firms' solvency. Financial resiliency is thereby drained; market discipline forgone.

## **II. THE PROBLEM: SHORT-RUN SUPERPRIORITY IN THE DERIVATIVES AND REPO MARKETS**

A bankruptcy filing strips creditors of contractual rights that they would otherwise have.

First, bankruptcy law bars the bankrupt's creditors from suing the debtor for repayment, bars them from trying otherwise to collect debts due from the bankrupt, and bars secured creditors from immediately seizing and liquidating their security. Later on, they all collect their security or what's due them, oftentimes when a plan of reorganization is completed. The purpose of this bar on collection is to do the best the system can to reorganize the failed firm into a viable enterprise. Second, creditors who were repaid within 90 days of the bankruptcy filing can be made to return their repayments, thereby allowing all creditors to share in that value. Third, there are limits on creditors' capacity to set off debts due from the bankrupt with debts due to the bankrupt. Fourth, creditors and suppliers generally cannot terminate an open contract with the bankrupt.

For creditors of the bankrupt that are derivatives or repo players, these rules are reversed to favor the derivatives and repo creditors. First, they can immediately collect on their debts. Second, they do not need to return payments they received within the 90 days prior to bankruptcy to the same extent. Third, they have broader rights to setoff debts due to bankrupt with debts due from the bankrupt. And, fourth, the derivatives and repo players can decide to terminate their contracts with the debtor, as opposed to the usual bankruptcy rule that gives this option to the bankrupt debtor.

Several of these baseline bankruptcy rules are in my view unwise. But, unwise or not, it is poor policy to have some of the rules favor contracts that are derivatives or repo contracts over other kinds of credit contracts. The impact is to drive more credit transactions into such shorter-term financial contracts from other kinds of credit channels. Moreover, at the moment of failure, it disrupts the reorganization-based nature of American bankruptcy by motivating creditors owning core credit positions in the derivatives and repo markets to liquidate their positions quickly to pull as much cash out of failing financial firms as they can, thereby hastening the firms' demise. The rules enhance run potential.

## **III. UNDERMINING MARKET DISCIPLINE**

The major damage done by the Bankruptcy Code here is that it weakens the derivatives and repo markets incentives for market discipline. The superpriorities' systemic impact is important at two different times. The first is when the economy is suffering an ongoing crisis. At that the time the question is whether superpriorities dampen or exacerbate a financial crisis. The answer is that it's hard to tell. Although

most commentary says the priorities help, there are strong reasons to think that they do not and that they in fact exacerbate a crisis by propelling more runs.

The second time the superpriorities have an important impact is well before the crisis hits, during ordinary financial times. During that period, the superpriorities sap market discipline and thereby increase the chance that when a financial crisis occurs, it will be worse than it otherwise would have been.

There are multiple channels for market discipline and each deserves more analysis than it will get here.<sup>5</sup> But the persistent overall impact of the Code's superpriorities is to weaken discipline in each channel. The most obvious weakening of market discipline comes from the priorities weakening of the counterparties' incentives to monitor one another — the kind of market discipline Greenspan was looking for. True, the derivatives book for a counterparty is opaque and difficult to monitor. But if the counterparties were made to bear more of the risk of counterparty failure, some would raise prices and some would seek better collective monitoring channels. Others would deal only with the strongest counterparties. Still others would reduce their exposure to a single counterparty or require that it substitute into a stronger financial structure. Weaker counterparties, if faced with higher prices or reluctant counterparties, would have incentives to strengthen their own balance sheet, such as by substituting more long-term financing for the short-term derivatives and repo financing.

The systemic justification usually given for the superpriorities is that they reduce contagion during a crisis. This may be true (although I question this view below), but it is more than counterbalanced conceptually by two, fairly heavy, counterweights. Superpriorities may reduce contagion, but they also induce runs during a crisis. And even if they induce reduce contagion more than they induce runs (which is by no means proven), they also have the large systemic costs of sapping market discipline.

The contagion idea is that if one institution is weakening and its counterparties cannot take their derivatives and repo investments out, then these counterparties will also fail. Then, like a row of dominoes, the financial system will topple. A difficulty with this view is that it's unclear why only derivatives and repo counterparties need to be protected from financial contagion. That is, why shouldn't all financial counterparties get that protection, in order to stop runs? And if the prioritized derivatives and repo creditors can take their money out quickly from a weakening financial institution, does that not increase contagion potential when other creditors bear the losses that the favored creditors do not bear, thereby weakening their institutions and, perhaps, driving them to fail?

The other difficulty with the contagion analytic is that the same process that reduces contagion also creates runs: the strong counterparty who sees the weakening one has incentives and means, via the superpriorities and bankruptcy exemptions, to pull its cash out of the weakening financial institution, like AIG, Lehman, and Bear Stearns. This can induce a run on the weakening institution, bringing about its failure when, if financial heads were made to cool down, they might have survived or been

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<sup>5</sup> For more extensive analysis, see Roe (2011, pp. 560-64).

disposed of in a more systemically sound way. Edwards & Morrison (2005: p. 101); Partnoy & Skeel (2007: p. 1049); Roe (2011: pp. 564-569); and Skeel (2010: pp. 10-11).

#### **IV. MODIGLIANI-MILLER APPLIED**

Applying one of finance theory's central insights helps us to better understand the impact of the superpriorities for derivatives and repo contracts.

The risks that bankruptcy law's safe harbors lift off of the shoulders of the derivatives and repo players do not disappear. Rather, they shift to others shoulders. Hence, proponents' arguments that derivatives and repo priorities reduce risk must be qualified: Although the safe harbors do indeed reduce the risk for derivatives and repo players, they do so in the first instance by transferring those risks to other financial players. One can think of these as a Newtonian First Law of Motion, of preservation of a system's total risk: risk is not directly reduced by financial manipulation, but only shifted from shoulder to shoulder. For such insights and development, Modigliani and Miller (1958) won their Nobel Prizes.

At one level, an M-M perspective undermines the usual contagion analysis and the view of the finance industry that netting and the other superpriorities reduce financial risk. In the first instance, the risk is not eliminated but transferred to the entities' other creditors. Similar arguments have been made in favor of secured credit and have been rebutted with an M-M analysis. Schwartz (1981); Bebchuk & Fried (1996).

But the M-M risk transfer analysis also rebuts some of the market discipline analytics I've offered thus far. By transferring the risk, yes, the bankruptcy rules do not reduce overall risk. They do reduce the derivatives and repo players' incentives for market discipline, as I've indicated. But they concomitantly raise the incentives of *other* creditors for more market discipline.

The reason this rebuttal fails — that is, the reason that the risk transfer is not a simple wash for market discipline — is that a major creditor of systemically central financial firms affected by American bankruptcy law is the United States as contingent guarantor. The United States does not react ordinarily like a contract creditor. It could, in principle, regulate the financial institutions more tightly and effectively, and the M-M analysis indicates why it should and why leaving the results to marketplace monitoring, as so enamored Alan Greenspan, is mistaken if the monitors are bankruptcy-favored.

The better next step in the analysis is not to rely on governmental prudential regulation. Rather, the better step is to hybridize by using bankruptcy rules to better harness market discipline than before, because governments will often be late to realize the risks that are emanating from one market or another to threaten financial stability.

## V. FURTHER CONSIDERATIONS

### A. Reducing and Increasing Contagion

1. *Ordinary contagion.* The Code's superpriorities were first justified as measures to reduce contagion. One institution fails and another, unable to get its cash out of the failed firm, is rendered illiquid and fails itself. This scenario is possible, but on an ex ante basis is offset by the possibility that the first institution, although weak, would not have failed were it not for the second institution's bankruptcy rights to pull cash out of the weak but potentially survivable firm.

Hence, we have reason to believe that the bankruptcy safe harbor priorities are as likely conceptually to spread contagion as they are to contain it.

2. *Information and collateral contagion.* The superpriorities also facilitate information contagion and encourage simultaneous liquidation of collateral in a financial crisis. Both difficulties were strongly in play in the financial crisis and the Code's superpriorities exacerbate both. Information contagion comes when lending markets discover they do not understand counterparty financial strength and stop lending until they acquire enough information; bankruptcy superpriority discourages early information acquisition. Collateral value contagion comes when financiers simultaneously sell similar collateral, depressing its price, thereby compromising the immediate value of other collateral. The lowering of other collateral value induces other lenders to themselves declare a default, seize collateral, and liquidate that collateral. The Bankruptcy Code allows derivatives and repo creditors, but not most others, to immediately seize and sell off their collateral, thereby facilitating collateral contagion. These two effects — information contagion and collateral-value contagion — are run-*enhancing* consequences of the superpriority rules we have. Prior analysis has not, as far as I know, shown the logical links between bankruptcy's payment priorities and these two crisis-exacerbating difficulties. See Roe (2011: pp. 567-569).

### B. Clearinghouses

Clearinghouses and collateral have been a major focus of reforms. Much of this effort is helpful, but much of it must be incomplete, as applying the M-M hypothesis to the setting shows us. Clearinghouses can enhance transparency, which is good here, especially in that it might alert government players to a problem earlier than otherwise. But much of the justification for the clearinghouses, as well as for strong collateral requirements, is that they are thought to reduce systemic risk. On this level, the argument is weak or at least not self-evident. See Pirrong (2009); Roe (2010; 2011: pp. 586-87).

Yes, the clearinghouse enables participants to net contracts and this reduces risk for those inside the clearinghouse system. But the risk is not assuredly eliminated. It can be, and often is, just transferred to creditors outside the insider clearinghouse system.

A weak financial institution, F (say, Bank of America), has two separate contracts, one with A (call it AIG) and one with C (call it Citibank). F owes \$100



million to AIG and another \$100 million to Citibank. The contract with AIG is a derivatives contract, which goes through the clearinghouse; the contract with Citibank is another kind of contract, maybe just a regular loan, and does not go through the clearinghouse. F also has a contract with B (call it Bear Stearns) through the clearinghouse for \$100 million, with B on the losing end.

Without a clearinghouse, F has a \$100 million asset (the \$100 million that Bear owes it) and owes \$200 million. Having only \$100 million (if these are its only assets and liabilities), F would have to pay AIG and Citibank each \$50 million and each of those two would suffer a \$50 million loss.

If AIG is systemically vital, its inability to collect the full \$100 million could drive it to fail. This is where the clearinghouse protects AIG. AIG's winning contract with F net's against Bear's losing contract with F. The clearinghouse here eliminates counterparty risk for these three players, *but only by transferring the risk to Citibank*, which instead of losing \$50 million, ends up losing the full \$100 million.

A, B, and F, as well as their attorneys, lobbyists, and supportive policymakers have celebrated the clearinghouse. Among its most important advertised features is that it reduces risk for its participants. And, as advertised, it does — *but only* for its participants. Citibank, however, now loses \$50 million more, since it can't crack into the clearinghouse's assets. If that extra loss pushes a systemically vital Citibank over the precipice, the clearinghouse has not, as it has been advertised to do, reduced systemic risk.

Whether or not the clearinghouse reduces systemic risk depends on the relative systemic importance of AIG and Citibank in these renditions of the clearinghouse basics, *not* on the clearinghouse's capacity to reduce risk among its members.

Much recent regulatory activity has focused on enabling, enhancing, and requiring clearinghouses for these kinds of financing arrangements. As said, clearinghouses offer multiple benefits, including better transparency, better pricing, and better regulatory potential. But some of their central proposed benefits do not withstand a Modigliani-Miller analysis, as much of what gets justified as reducing systemic risk is really just moving that risk somewhere else in the system.

### **C. The Dodd-Frank Uncertainties in Application**

Congress reacted to the financial crisis with major financial reform legislation, which did not alter the bankruptcy rules but did potentially move a wider array of financial institutions out from under the Bankruptcy Code's repo rules and into a new financial resolution regime, which would be run by the Federal Deposit Insurance Corporation. For such financial institutions, Dodd-Frank brings back the bankruptcy bar on counterparties immediately collecting on their derivatives and repos (for systemically important financial institutions), but typically only for a single business day, and it then otherwise reaffirms the safe harbor superpriorities. Dodd-Frank, § 210(c)(8)(C)(i).

Dodd-Frank potentially also allows the FDIC to choose among assets and liabilities that could be transferred from a failed financial institution to a bridge

corporation. Dodd-Frank, § 210(h)(1)(B). Such a choice creates the potential to adjust priorities, see Roe & Skeel (2009), but is limited by a statutory floor, namely that all creditors are entitled to the value they would have received in a Chapter 7 liquidation of the company and the requirement that a failed firm's derivatives' book with a particular counterparty be transferred intact, without cherry-picking. In such circumstances, much of the decision-making on reorganization is vested in the hands of the centralized regulator. However, the hurdles to moving systemically vital financial institutions that are not themselves banks or similar is not automatic, with some commentators seeing the hurdles to using the statute as substantial. If the hurdles are not overcome, then the (unchanged) bankruptcy rules govern.

## CONCLUSION

American bankruptcy law subsidizes derivatives and repo contracts, by moving them up on the bankruptcy repayment queue above other creditors of the failing firm. By favoring such short-term financial contracts, the rules weaken market discipline during ordinary financial times in ways that can leave financial institutions weaker than they would be otherwise. This weakness, in turn, exacerbates financial failure during an economic crisis. The crisis can emanate from elsewhere in the economy — as the 2007-2008 downturn emanated from the mortgage market — but then magnify its impact.

Because the superpriorities in the Code are available only for short-term financing arrangements, they thereby favor short-term financing arrangements over more stable longer term arrangements. While proponents of superpriority justify the superpriorities as reducing contagion, there's good reason to think that they do not reduce contagion meaningfully, but contribute to runs and, most importantly, undermine market discipline. A basic application of the Modigliani-Miller framework suggests that the risks policymakers might hope the favored treatment would eliminate are principally shifted from inside the derivatives and repurchase agreement markets to creditors who are outside that market. The most important outside creditor is the United States, as de jure or de facto guarantor of too-big-to-fail financial institutions.

Much of this analytic is applicable to financial contracts outside of the United States, where such superpriorities also exist and where there are third-parties, such as governments that bear the risk of financial institution failure.

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