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Rehypohecation and Intermediary Risk

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Rehypothecation and Intermediary Risk

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My presentation explores a fundamental distortion of the legal principle of *nemo dat quod non habet*—one cannot give what one does not have ("*nemo dat*"). This distortion, resulting from a practice known as rehypothecation, caused a type of intermediary risk that was at the heart of the recent global financial crisis and that threatens to trigger future such crises.

Intermediary risk, generally, is the risk that property held by an intermediary on behalf of third parties may be seized by creditors of the intermediary.[2] This risk has great practical importance where the property held by the intermediary is investment securities (hereinafter "securities") and the intermediary is a broker-dealer, bank, or other financial services

[1] Copyright © 2010 by Steven L. Schwarcz, the Stanley A. Star Professor of Law & Business, Duke University School of Law and Founding/Co-Academic Director, Duke Global Capital Markets Center. E-mail: schwarcz@law.duke.edu. This presentation is excerpted from *Distorting Legal Principles*, forthcoming Volume 35, Issue No. 4, of THE JOURNAL OF CORPORATION LAW (2010).
[2] Steven L. Schwarcz, *Intermediary Risk in a Global Economy*, 50 DUKE L.J. 1541, 1565 (2001). The intermediary risk addressed by this presentation—that an intermediary may fail to return a customer's securities (or equivalent securities)—is a subset of counterparty risk. Counterparty risk is the risk that Party A, who relies on Party B's performance, will be harmed if Party B fails to perform.

firm[3] holding the securities on behalf of third-party investors (hereinafter, "investors," or "customers" of the intermediary).

Although intermediary risk can arise in several ways, the intermediary risk at issue in the financial crisis resulted from a distortion of *nemo dat* caused by a globally widespread, albeit abstruse, practice called "rehypothecation." Rehypothecation occurs when an intermediary holding securities on behalf of investors—often a broker-dealer acting as prime broker for its customers—grants a security interest in (or otherwise encumbers) those securities in order to obtain financing for itself.

Rehypothecation has good business justification, enabling intermediaries to obtain low-cost financing. However, its distortion of *nemo dat* creates uncertainty whether customer securities become subject to claims of an intermediary's creditors, to whom the securities have been rehypothecated. The resulting intermediary risk can motivate the intermediary's customers to withdraw their investments if they hear rumors of, or otherwise fear, an intermediary's insolvency.

The most dramatic and consequential example of this occurred in the autumn of 2008. Thousands of customers, including many hedge funds, rushed to withdraw their investments from the accounts of Lehman Brothers, which had been acting as their prime-brokerage intermediary. Much like a bank run, this inadvertently triggered—or, at least, significantly contributed

[3] In the United States, the Uniform Commercial Code (UCC) refers to such an intermediary as a "Securities Intermediary." UCC § 8-102(a)(14).

to—Lehman's collapse. And Lehman's collapse was one of the central triggers of the worldwide financial crisis.[4]

A. The Distortion

An intermediary's granting a security interest in securities that it owns would be conceptually clear and consistent with *nemo dat*: one may always grant a security interest in property (which, after all, is a "bundle of rights") to the extent of one's rights therein. The rehypothecation that occurred in Lehman's case was different, however.

Lehman, like many other prime-brokerage intermediaries, insisted that customers contractually consent to allow the intermediary to directly rehypothecate the customers' securities as collateral for financing obtained by the intermediary. Although this practice has been widespread and longstanding, it is conceptually flawed in that the intermediary does not own those securities but merely holds those securities on behalf of its customers, who at most give the intermediary a security interest in those securities. Lacking ownership of the customers' securities, the intermediary should not be able, under the principle of *nemo dat*, to grant a security interest that enables its creditors to obtain ownership of those securities through foreclosure. Conceptually, therefore, Lehman and other prime-brokerage

[4] A threshold question is, what is meant by "distortion of a legal principle"? The distinction between mandatory and default rules helps to inform the answer. By "legal principle," I mean a normally mandatory rule or doctrine, such as the *nemo dat* rule, that is so generally accepted within a legal system as to form a basis for reasoning. Distortion of a legal principle would occur when something distorts the principle in an unexpected way, creating uncertainty or confusion that undermines the basis for reasoning afforded

intermediaries ignored *nemo dat* when engaging in this form of rehypothecation.[5]

B. Consequences of the Distortion

Rehypothecation has both positive and negative consequences. As discussed, it enables securities intermediaries to obtain low-cost financing. But its negative consequences (intermediary risk) have been devastating, including the failure of Lehman Brothers and the resulting worldwide financial crisis.

At least in the United States, these consequences should have been mitigated, if not eliminated, by protections provided in commercial law, by a limitation on rehypothecation provided in securities law, and by government insurance of securities accounts (through the Securities Investor Protection Corporation, or "SIPC"). The commercial-law protections failed, however, because intermediaries had lobbied, in the UCC revision process, to exempt rehypothecated securities from those protections. The securities-law limitation failed because it was insufficient in amount to prevent customer "runs" from destroying intermediaries. The government insurance failed because its coverage was insufficient to prevent the panicked withdrawal by hedge-fund customers.

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by the principle. A distortion might occur, for example, if a normally mandatory legal rule were unexpectedly treated as a default rule.

[5] All further references in this presentation to rehypothecation shall mean this form of rehypothecation—in which the broker-dealer or other intermediary directly pledges the

C. Towards a Framework for Balancing Consequences

Should rehypothecation have been allowed to distort *nemo dat* in this way? Answering this question would involve a balancing of the consequences of allowing, and of disallowing, rehypothecation.

Balancing consequences. In a business context, consequences should be balanced to maximize efficiency. Economists generally measure efficiency by the Pareto and Kaldor-Hicks models. Pareto Efficiency means that a transaction is efficient if it makes at least one person better off without harming others. In contrast, Kaldor-Hicks efficiency means that a transaction is efficient if its overall benefits exceed its overall harm, regardless of which parties are benefited and which are harmed. The Pareto Efficiency model has few practical applications, and "it is pretty clear that the operating definition of efficiency in economics is not Pareto superiority." Economists generally utilize the Kaldor-Hicks model when balancing consequences to maximize efficiency.

The widespread use of cost-benefit analysis can be viewed as a common sense application of Kaldor-Hicks efficiency. In the United States, for example, before any regulatory agency can promulgate a major rule, it must deliver a cost-benefit analysis to Congress in which it attempts to monetize the benefits and costs of regulation, including any non-quantifiable factors that may impact the agency's decision. Regulation can be costly, so efficiency demands that its costs do not exceed its benefits. Government

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customers' securities as collateral even though it does not own, but merely has a security interest in, those securities.

policymakers also use cost-benefit analysis when choosing between alternative options.

A Kaldor-Hicks model of cost-benefit analysis may not be appropriate, however, when analyzing the distortion of legal principles, even in a business context. Balancing overall costs and benefits makes sense for assessing governmental actions that at least theoretically will be neutral as to any given group. But when parties are taking self-serving actions that could impose externalities on third parties, such as when they seek to distort legal principles for business ends, the impact should not be presumed to be inherently neutral.

For example, even if the overall costs of rehypothecation were to exceed its benefits, some intermediaries may want to engage in rehypothecation because the allocation of its benefits and costs would apply differently to them: they would benefit directly from the lower cost financing afforded through rehypothecation, whereas indirect costs, such as the costs of a systemic collapse of the financial system, would be spread among many. This is a type of tragedy of the commons: the benefits of exploiting finite capital resources accrue to individual market participants whereas the costs of exploitation, which affect the real economy, are distributed among an even wider class of persons, so market participants have insufficient incentive to internalize their externalities.

<u>Adjusting the balancing for potential bias</u>. In this potentially biased context, how conceptually should consequences be balanced? The Pareto model still appears unrealistic if we allow that the distortions could be

socially desirable. In a separate context, however, courts have wrestled with this same conceptual question.

Courts face this same question when deciding whether to substantively consolidate separate corporate entities in bankruptcy—a distortion of the legal principle of corporate separateness. In that context, courts grapple with balancing consequences where substantively consolidating those entities would maximize overall gain to creditors of the entities (which would be socially desirable under the Kaldor-Hicks model) at the cost of harming one or more creditors that extended credit in good faith on the integrity of the entity separateness (which would violate the Pareto model). The creditors favoring substantive consolidation argue for it solely in their own interests because such consolidation would improve their recovery at the cost of imposing an externality—lower recovery for creditors opposing such consolidation.

Although federal circuit courts are jurisprudentially split in this context, no such court has explicitly applied a simple positive balancing test. Some circuit courts apply a modified balancing test under which they will order consolidation only where its benefits "heavily outweigh" its harm. Implicitly, this test appears intended to balance the consequences that self-serving creditors enjoy the benefits of the consolidation whereas innocent creditors are harmed. Three circuit courts, however, implicitly adhere to a Pareto, or do-no-harm, model.

Although I am not claiming that substantive consolidation is, or should be, an exact precedent for the more general question of distorting legal principles, I believe that its approaches provide insight for a normative analysis of that general question. If the distortion is not likely to be socially desirable, a do-no-harm test is clearly justified. But if, as is the case with rehypothecation, the distortion may well be socially desirable, a balancing test is more appropriate. However, a simple positive balancing would introduce the potential for abuse where parties, by the distortions, impose externalities on third parties.

Because the parties enjoying the benefits are not necessarily the parties suffering the costs, a heavily-outweigh balancing test can help to rebalance the distributive effects. Furthermore, the consequences of distortions are difficult to anticipate and quantify; a heavily-outweigh test would require the benefits to be large in order to offset unknown or undervalued costs. The high burden of this test is also morally justified since any action that benefits certain parties at the cost of potentially seriously harming others is presumptively unjust, requiring a compelling justification. Moreover, a heavily-outweigh test is consistent with the "expected utility" approach to uncertainty often used by economists. This approach recognizes that people are not risk neutral, and thus costs and benefits should not be strictly compared. Instead, to reflect the reality of risk aversion, costs should be more heavily weighted than benefits in making comparisons.

Thus, a distortion of legal principles should thus be allowed only if its benefits would heavily outweigh its costs.

<u>Informing the balancing through long-standing distortions</u>. I next test the merits of this heavily-outweigh balancing approach by applying it to

rehypothecation. Before doing so, however, it is useful to examine whether areas of law where *nemo dat* has long been distorted might inform this approach. To this end, consider the commercial law rules in the U.S. governing holders in due course of instruments—that is, persons who take instrument for value, in good faith, and without notice of a problem—and buyers in the ordinary course of goods from merchants—that is, persons who buy goods from merchants in good faith and without notice of a problem. The former rules distort *nemo dat* by providing that a holder in due course of an instrument has the right to require the obligor thereunder to make payment notwithstanding certain defenses to payment that such obligor may assert against a prior holder of the instrument. The latter rules distort *nemo dat* by providing, for example, that an owner of goods who merely entrusts possession of the goods to a merchant who deals in goods of that kind gives the merchant the power to transfer good title to the goods to a buyer in the ordinary course of business, and that a buyer in ordinary course of goods takes free of any security interest in the goods that encumbers the seller's own right to the goods.

There are important policy reasons why these long-standing rules distort *nemo dat*. These rules achieve a measure of finality in commercial transfers of instruments to holders in due course and in sales of goods to buyers in the ordinary course by specifying that these transferees take title to these assets free and clear of most competing claims and defenses. That provides the clarity that transferees need to viably engage in the transactions. The rules also reduce transaction costs that might undermine the commercial viability of the transfers by reducing the need for these transferees to engage in due diligence regarding the possibility of any such competing claims or defenses.

Thus, although these rules sometimes may harm third parties—for example, third parties may not assert otherwise valid claims or defenses on the transferred instruments or goods—the benefits achieved by distorting *nemo dat* under the rules appear to at least outweigh, and perhaps might heavily outweigh, the costs of the distortion. On its face, though, a factual inquiry as to the degree by which those benefits outweigh those costs would not inform a normative analysis because the existence of positive law does not necessarily inform what the law should be. History alone should not sufficiently justify these distortions to *nemo dat*.

The long-standing existence of these rules, and thus of these distortions, nonetheless suggests a normative insight: the very fact these distortions are long-standing makes them more likely than recent distortions to generate benefits that heavily outweigh their costs. This is because (whether or not the benefits of these distortions originally heavily outweighed their costs) the distortions are now so ingrained in commercial law that third parties should be aware of their impact and thus should structure their transactions accordingly. In other words, the *nemo dat* principle is no longer distorted by <u>these</u> distortions in an unexpected way.

For example, lenders secured by a merchant-borrower's inventory would no longer contemplate the possibility, if the merchant defaults in repayment, of proceeding against inventory sold by the merchant to its customers. Instead, lenders will make other arrangements—arrangements that themselves may be enabled by an evolution of law in response to the rules—to protect their rights to repayment, such as monitoring and controlling cash receipts from the merchant's inventory sales. Over time, the costs imposed by distortions of legal principles can diminish as third parties adapt and the law evolves to accommodate the adaptations.

Accordingly, to the extent a legal system is flexible enough to cope over time with a distortion of legal principles, a complete balancing of costs and benefits of the distortion should theoretically take into account the costs of adapting to the distortion and the reduction in distortion costs as such adaption occurs. In practice, though, these changing adaptation costs would be hard to measure. Any adaptation would likely require a long transition period, and it would be difficult to quantify the adaptation costs during such period. It also is possible that adaption will never be fully achieved for some distortions. Indeed, even though rehypothecation has been widespread and longstanding for well over a century, the law has not yet adequately coped with its uncertainties. Because these adaptation costs are likely to be much lower than direct costs, I will treat them as relatively insignificant for computational purposes.

I therefore conclude that the consequences—i.e., the costs, including the costs of distorting *nemo dat*, and the benefits—of allowing or disallowing rehypothecation should be balanced under a heavily-outweigh test.

D. Applying the Framework

In order to apply the heavily-outweigh balancing test, one needs to identify and quantify the costs and benefits of allowing rehypothecation. First consider benefits. Rehypothecation certainly has been important to the economy, to securities intermediaries and their customers, and to the prime-brokerage business. Some have observed, for example, that the prime-brokerage business was "built on [the] practice known as rehypothecation."[6] Historically, rehypothecation has been a less costly way of financing the prime-brokerage business than turning to other funding sources. Indeed, the sudden drop in rehypothecation in response to Lehman's failure resulted in higher funding costs for financial institutions and, possibly reduced liquidity. These higher funding costs have been loosely estimated as between 90 and 240 basis points.[7]

Moreover, it appears that rehypothecation is likely to be important to financial institutions in the future. There is evidence that significant rehypothecation may be taking place a year after Lehman's failure, even though the absolute amount has not quite rebounded to pre-Lehman levels. The reemergence of rehypothecation is not surprising, since attempts by customers (such as hedge funds) "to diversify counterparty risk and [protect] their collateral [through] third part[y] [custodians] increase complexity and costs for hedge funds, while not necessarily reducing risk and at the same time making business harder for prime brokers."[8]

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[6] James Mackintosh, *Collapse of Lehman Leaves Prime Broker Model in Question*, FIN. TIMES (London), Sept. 25, 2008, at 47.
[7] Mackintosh, *supra* note 6 (noting that, though the cost increase is difficult to determine, brokers estimated as of Sept. 25, 2008 that London and Wall Street banks' cost of internal financing absent rehypothecation was approximately 150-300 basis points over LIBOR, compared with 60 basis points over LIBOR for rehypothecated assets).
[8] Josh Friedlander, *Heavy Lifting Ahead*, ABSOLUTE RETURN MAGAZINE, April 2009, at 4.

Thus, although a precise numerical measure of the benefits of rehypothecation is not feasible, the range appears to be in the rough order of magnitude of billions of dollars per year.

Next consider the costs of allowing rehypothecation. As discussed, rehypothecation's distortion of *nemo dat* creates uncertainty whether customer securities are subject to claims of the intermediary's creditors to whom the securities have been rehypothecated, resulting in intermediary risk that can motivate the intermediary's customers to withdraw their investments if they hear rumors of, or otherwise fear, an intermediary's insolvency. Such withdrawal, in turn, could cause the intermediary to collapse or even help to trigger a broader financial meltdown.

These costs could conceivably be huge. For example, the recent financial crisis has been estimated to have cost the United States alone at least tens of trillions of dollars. If rehypothecation increases the chance of another financial meltdown by even a few percent per year, the cost would be staggering. And this cost would not even include the cost of rehypothecation causing one or more intermediaries to collapse without triggering a broader systemic effect.

In the context of rehypothecation, however, these costs cannot be reliably estimated because of the difficulty in knowing ex ante the probability that the distortions caused by rehypothecation will cause these consequences. Without more, one cannot determine whether the benefits of allowing rehypothecation heavily outweigh its costs. This calculus nonetheless can be informed by the "precautionary principle," often used by regulators applying cost-benefit analysis to address the cost of catastrophic events or large, irreversible effects where the actual level of risk is indeterminate. This principle presumes that the benefits of restricting the risk through regulation will exceed the costs. In the principle's most utilized form, regulators may decide to regulate an activity notwithstanding lack of decisive evidence of the activity's harm.

Rehypothecation would fit within the scope of the precautionary principle, since allowing rehypothecation would perpetuate the risk of a catastrophic event—another systemic collapse of the financial system—whereas the actual level of risk is indeterminate. To this extent, it may well be appropriate to presume that the benefits of allowing rehypothecation will not heavily exceed the costs. That presumption would mean that rehypothecation should not be allowed, or at least should be regulated.

Disallowing rehypothecation would be a harsh result. Nonetheless, it would encourage parties to explore possible ways of engaging in rehypothecation that could mitigate its costs (uncertainty resulting from distortion) but preserve its benefits (lower funding costs). For example, instead of a prime broker or other intermediary rehypothecating customers' securities that it does not own, perhaps the intermediary should "rehypothecate" only its right to receive payments from those customers. Because the intermediary's right to receive those payments is secured by the customers' securities, a lender to the intermediary would be able to look to those securities as indirect collateral; thus, lenders secured in this manner would be expected to continue lending to prime brokers and other intermediaries at reasonably advantageous interest rates. Furthermore, the customers' securities would not be directly exposed to claims of the intermediary's creditors—an exposure that created the intermediary risk that motivated Lehman's customers to withdraw their investments.

I do not claim that rehypothecation should necessarily be disallowed. The precautionary principle and its application to rehypothecation within my presentation's framework are merely approaches that regulators could utilize, or not. These approaches nonetheless do provide a useful way of thinking about whether to allow the distortion of legal principles caused by rehypothecation and about potential lower-cost alternatives.