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Credit Default Swaps and the Empty Creditor Hypothesis—If it Ain't Broke, Don't Fix it

Florian Gamper

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CREDIT DEFAULT SWAPS AND THE EMPTY CREDITOR HYPOTHESIS—IF IT AIN'T BROKE, DON'T FIX IT

FLORIAN GAMPER¹

Abstract	179
I. Introduction	180
II. The Empty Creditor Hypothesis (ECH)	184
III. The Two Limbs of the ECH	186
IV. The ECH as an Economic Problem	187
A. Theoretical Evidence	189
B. Empirical Evidence	193
V. The ECH as a Legal Problem	199
A. Was There Ever Unity Between Legal and Economic Rights?	201
B. Investor Rights are Based on the Benefits Received by the Company	205
C. Which Theory Fits the Facts Better?	210
D. The Homogeneity Assumption	212
E. Normative Arguments Against the Homogeneity Assumption	219
F. Does Corporate Law Assume that Investors Vote to Maximise the Value of a Company?	221
VI. Examples of Empty Creditors and Regulatory Developments	224
A. Stock Lending	225
B. The Blackstone Codere CDS	229
C. Regulatory Developments	231
VII. Conclusion	233

ABSTRACT

An empty creditor is a creditor who, through the use of derivatives, especially credit default swaps (CDSs), takes a position where she retains the legal rights of a creditor but has little or no economic exposure to a borrower.

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Thus far, the debate on empty creditors has focused mainly on how the law should react to the perceived problem of empty creditors. The debate also covers the prominent argument that empty creditors violate the underlying corporate law assumption that creditors and shareholders hold their legal rights in proportion to their economic exposure to a company.

This article argues that the current debate is fundamentally misguided—that empty creditors are in fact not a problem. The article presents a theoretical argument suggesting that empty creditors are unlikely to be a widespread phenomenon. Further, the article argues that the law has never made the assumption that legal rights are held in proportion to economic exposure; in fact, taking economic exposure into account when allocating legal rights to investors is contrary to fundamental principles of corporate law.

I. INTRODUCTION

Derivatives have gone from relative obscurity—mainly of interest to financial practitioners, regulators, and academics—to something that has captured the public imagination. CDSs in particular have acquired the image of not just being “financial weapons of mass destruction,”² but also being the ultimate in overblown financial wizardry deprived of any social utility. From magazines like *The Economist*³ to investors like George Soros⁴ and comedians like Jon Stewart⁵, the great and the good have been criticizing CDSs, sometimes regarding them as little more than legalized fraud.⁶ An interesting argument in the CDS debate is the so-called empty creditor hypothesis (ECH) put forward by professors Henry T.C. Hu and Bernard Black.⁷ At a very general level, the ECH

² Letter from Warren E. Buffett, Chairman of the Bd., Berkshire Hathaway Inc., to the Shareholders of Berkshire Hathaway Inc. (Feb. 21, 2003), <http://www.berkshirehathaway.com/letters/2002pdf.pdf>.

³ *CDSs and Bankruptcy: No Empty Threat*, *ECONOMIST* (June 18, 2009), <http://www.economist.com/node/13871164>.

⁴ George Soros, *One Way to Stop Bear Raids*, *WALL ST. J.* (Mar. 24, 2009, 12:01 AM), <http://www.wsj.com/articles/SB123785310594719693>.

⁵ See *The Daily Show with Jon Stewart: December 4, 2013—Blackstone & Codere*, (Comedy Central broadcast on Dec. 4, 2013), <http://thedailyshow.cc.com/videos/0g8sum/blackstone---codere>.

⁶ Lawrence Delevingne, *Harry Markopolos: CDS Fraud Will Make Madoff Look “Small-Time”*, *BUS. INSIDER* (Aug. 12, 2009, 2:01 PM), <http://www.businessinsider.com/harry-markopolos-cds-fraud-will-make-madoff-look-small-time-2009-8#ixzz3VxCbxtLb>.

⁷ See, e.g., Henry T. C. Hu & Bernard S. Black, *Equity and Debt Decoupling and Empty Voting II: Importance and Extensions*, 156 U. PA. L. REV. 625 (2008), <http://ssrn.com/abstract=1030721> [hereinafter Hu & Black, *Importance and Extensions*]; see also Henry T. C. Hu & Bernard Black, *Debt, Equity and Hybrid Decoupling: Governance and Systemic Risk Implications*, 14 *EUROPEAN FIN. MGMT.* 663 (2008) [hereinafter Hu & Black, *Governance and Systemic Risk Implications*].

states that derivative transactions, notably CDSs, can lead to a decoupling “of economic rights (to receive payment of principal and interest); contractual control rights (to enforce, waive, or modify the terms of the debt contract); other legal rights (including rights to participate in bankruptcy proceedings and to sue company directors and officers under securities and other laws).”⁸

One of the problems associated with this decoupling is that it can lead to a situation where creditors may take an unnecessarily tough stance against borrowers.⁹ If a creditor has a CDS written on the debt she is owed, then she might be indifferent as to whether she receives payment from the borrower or from the CDS seller.¹⁰ For creditors, bankruptcy is costly and creditors usually receive less than the outstanding amount.¹¹ Therefore, the law, so the argument goes, assumes that creditors have incentive to work with borrowers to avoid bankruptcy.¹² However, with the advent of CDSs, this assumption may no longer be justified.¹³ When a borrower gets into financial difficulties and a creditor is fully protected through a CDS, the creditor might well choose to put the borrower into insolvency (thereby triggering the CDS) rather than work with the borrower constructively—the creditor becomes an *empty creditor* (a creditor with all the legal rights but no economic exposure to the borrower).¹⁴

Proponents of the ECH claim that empty creditors are a major concern, and some are asking for immediate policy action.¹⁵ This article, on the other hand, will argue that empty creditors are not a significant issue. One of the major problems with the current ECH debate is that it confuses two distinct issues—the economic problem and the legal problem:

- The *economic problem* refers to the claim that the decoupling of economic and legal ownership provides the wrong incentives to creditors (i.e. makes creditors indifferent towards the borrowers’ fates or even turning them against borrowers). Essentially, the

⁸ Hu & Black, *Governance and Systemic Risk Implications*, *supra* note 7, at 664.

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.*

¹⁵ See Dante Altieri Marinucci, *Empty Creditor Syndrome and Vivisepture: Preventing Credit-Default-Swap Holders from Pushing Companies into Premature Graves by Refusing to Negotiate Restructurings*, 62 CASE W. RES. L. REV. 1285, 1313 (Summer 2012). “As Congress considers ways to increase the efficacy of Dodd-Frank, it should recognize that an adjustment to the regulation of the credit-default-swap market to include a protection against empty creditor syndrome would be valuable for our economy.” *Id.*

economic problem deals with the issue that CDSs may lead to inefficiencies because incentives are distorted—i.e. fundamentally healthy companies may be put into bankruptcy even though from an economic point of view it would be more beneficial if they survive.¹⁶

- The *legal problem* refers to the claim that the current legal and regulatory regime is based on the assumption of unity between economic and legal ownership, and decoupling the two may lead to a misfit of law and commercial practice. The legal problem essentially deals with the issue that CDSs may lead to suboptimal outcomes because the law assumes that creditors will act one way when in fact they act in another way.¹⁷

Some of the literature on this topic deals only with the economic problem, while other literature deals solely with the legal aspects.¹⁸ However, both of these approaches are grouped together as the ECH.¹⁹ Having the same name for two distinct problems is not in itself an issue as long as it is recognized that the two are different. This is especially important to avoid the fallacy of claiming that because one problem is true or false, this makes the other problem true or false. Of course, there might be overlap between the two; conceptually, however, it is important to keep them apart. With regard to the economic problem, this paper will argue that once the interactions between creditors, borrowers, and CDS sellers is taken into account, it is unlikely that empty creditors are a significant issue. With regard to the legal problem, this paper will suggest that empty creditors do not violate any of the background assumptions on which corporate law is built. This article will make the case that voting rights are justified solely by reference to the contribution made by an investor to the company. The reasons for making the investment or the incentive for an investor are irrelevant; therefore, it is also irrelevant if their incentives are changed due

¹⁶ Hu & Black, *Governance and Systemic Risk Implications*, *supra* note 7.

¹⁷ *Id.*

¹⁸ See, e.g., Patrick Bolton & Martin Oehmke, *Credit Default Swaps and the Empty Creditor Problem*, 24 REV. FIN. STUD. 2617 (2011) (dealing only with the economic problem); see also Yesha Yadav, *Insider Trading in Derivatives Market*, 103 GEO. L.J. 381 (2015) [hereinafter Yadav, *Insider Trading in Derivatives Market*] (dealing with the legal problem).

¹⁹ See, e.g., Hu & Black, *Governance and Systemic Risk Implications*, *supra* note 7, at 664. Hu and Black seem to group both problems as one: “Both law and contracting practice assume that the elements of this package are generally bundled together. It is assumed in particular that creditors are normally interested in keeping a solvent firm out of bankruptcy and (intercreditor conflicts aside) in maximising the value of an insolvent firm.” *Id.*

to derivatives. Thus, contrary to what Professor Hu, Black and other proponents of ECH claim, empty creditors are not a significant problem. Basing shareholders' and creditors' voting rights (shareholders have voting rights in "normal" times, and creditors have voting rights in times of financial distress) purely on the benefit provided to the company is in stark contrast to other commonly proposed approaches. For instance, Easterbrook and Fischel claim that shareholders have voting rights because they are the recipients of the residual income of the company, and as such have the right incentives.²⁰ Thompson and Edelman argue that voting rights are based on the propensity of shareholders to make the right decision.²¹

A word of caution, however: this paper only deals with the ECH and not with any of the other issues surrounding derivatives. In particular, this paper does not deal with what can be considered the macro aspects of derivatives (e.g. systemic risk). Therefore, the arguments in this article should not be taken to suggest that there are no good reasons for regulating derivatives, merely that whilst there may or may not be such reasons, the ECH is not one of them. Also, this paper focuses exclusively on the United States and the United Kingdom, no other jurisdictions.

This paper is structured as follows: Part II will introduce the ECH generally, and give an overview of the current debate.²² Part III will argue that the current debate is confused because it does not draw a clear enough distinction between the economic problem and the legal problem.²³ Part IV will discuss the economic problem associated with the ECH, arguing that if the ECH is put into a general framework, taking into account the interactions between borrowers, lenders, CDS sellers, and CDS buyers, it turns out that it is unlikely that empty creditors are a significant problem.²⁴ Part V will analyse the ECH legal problem, suggesting that it is based on a misunderstanding of corporate law and insolvency law.²⁵ Part VI will analyse some examples in which empty creditors allegedly cause a problem.²⁶ Part VII will summarize the findings.²⁷

²⁰ FRANK H. EASTERBROOK & DANIEL R. FISCHEL, *THE ECONOMIC STRUCTURE OF CORPORATE LAW* 63–89 (1996).

²¹ See Robert B. Thompson & Paul H. Edelman, *Corporate Voting*, 62 *VAND. L. REV.* 129, 149 (2009). "Shareholders are the appropriate group to monitor the board and correct errors because they are uniquely sensitive to the principal signal indicating a deviation of the board from its duty to the corporation: the market price of the corporation's stock." *Id.*

²² See *infra* Part II.

²³ See *infra* Part III.

²⁴ See *infra* Part IV.

²⁵ See *infra* Part V.

²⁶ See *infra* Part VI.

²⁷ See *infra* Part VII.

II. THE EMPTY CREDITOR HYPOTHESIS (ECH)

Hu and Black's original analysis of *decoupling* was conducted in the context of shareholders and subsequently extended to creditors.²⁸ However, this does not add much complexity to the debate because the principles behind empty creditors and 'empty shareholders' are the same. As such, many of the arguments in relation to shareholders can be applied directly to creditors. As Hu and Black write:

Just as the conventional understanding of share ownership assumes the bundling of a standard set of rights and obligations, so too a traditional conception of debt ownership includes a standard package of economic rights (principally principal and interest payments), control rights, default rights, and other rights and obligations under contractual covenants, federal bankruptcy law, and, to a limited extent, state corporate law.²⁹

To address the problem posed by empty creditors, Hu and Black do not propose to ban CDSs; rather, they advocate a regime where CDS positions need to be disclosed³⁰ as well as a potential system in which investor voting rights are adjusted on the basis of their derivatives position,³¹ changing share lending regulation,³² and changing the mechanisms of shareholder voting.³³ Disclosure would allow companies to accurately ascertain who holds their debt and equity.³⁴ Voting rights based on economic interest would ensure that only persons interested in enhancing the value of the company would be allowed to vote.³⁵ In a similar spirit, Martin and Partnoy argue that, "regulators should strongly consider taking away the votes of options buyers and sellers."³⁶ Baird and Rasmussen argue for specific amendments to the U.S. Bankruptcy Code.³⁷ Hemel argues that disclosure and changing voting rights would not adequately address the problems posed by empty creditors.³⁸ He therefore calls for the

²⁸ See, e.g., Hu & Black, *Importance and Extensions*, *supra* note 7, at 728–35; see also Hu & Black, *Governance and Systemic Risk Implications*, *supra* note 7, at 679–86.

²⁹ Hu & Black, *Governance and Systemic Risk Implications*, *supra* note 7, at 728. Just as shareholders can be empty voters, so too we can have empty creditors.

³⁰ See, e.g., Hu & Black, *Importance and Extensions*, *supra* note 7, at 682–94.

³¹ *Id.* at 696.

³² *Id.*

³³ *Id.* at 696–97.

³⁴ *Id.*

³⁵ *Id.*

³⁶ Shaun P. Martin & Frank Partnoy, *Encumbered Shares 1* (Univ. of San Diego Law & Econ. Research Paper Series, Paper No. 6, 2004), http://digital.sandiego.edu/cgi/viewcontent.cgi?article=1031&context=lwps_econ.

³⁷ See Douglas G. Baird & Robert K. Rasmussen, *Antibankruptcy*, 119 YALE L. J. 648 (2010).

³⁸ Daniel Jacob Hemel, Comment, *Empty Creditors and Debt Exchanges*, 27 YALE J. ON REG.

amendment of the definition of credit event in the ISDA Master Agreement to include voluntary restructuring.³⁹ Marinucci points out that it is unlikely that such a change would happen voluntarily and calls for legislation to effect such a change.⁴⁰ Yadav focuses specifically on the role that CDSs play in circumventing existing legislation, claiming that CDSs are a particularly useful tool for insider dealing.⁴¹

On the other hand, ISDA argues that “[a]lthough appealing on the surface, the empty creditor hypothesis is not consistent with either the way credit default swaps work nor with observed behaviour in debt markets.”⁴² Among other things, ISDA points out that some claims in connection with how empty creditors behave in bankruptcy proceedings are wrong because they do not take into account the mechanism of settling CDSs (especially with regards to cash-settled CDSs).⁴³ Lumsden and Fridman argue that, at least in the context of Australian law, no legislative change is required.⁴⁴ Dombalagian sees positive elements in decoupling of economic and legal ownership, arguing that it can lead to better corporate governance in the long run.⁴⁵ In a similar vein, Yadav argues that taking into account the actions of CDS sellers, credit protection can be positive.⁴⁶

Within the more finance-orientated literature, Danis⁴⁷ and Subrahmanyam, Tang, and Wang⁴⁸ find empirical evidence to support the ECH. Aspeli and Iden find no such evidence.⁴⁹ Bolton and Oehmke present a theoretical model that

159, 165–67 (2010).

³⁹ Hemel, *supra* note 38, at 167–69. Most CDSs are governed by the ISDA Master Agreement; therefore, a change in the definition of credit event could be achieved relatively easily by amending the ISDA Master Agreement. *Id.*

⁴⁰ Marinucci, *supra* note 15.

⁴¹ Yadav, *Insider Tradings in Derivatives Market*, *supra* note 18.

⁴² David Mengle, *The Empty Creditor Hypothesis*, 3 ISDA RES. NOTES 13 (2009), <https://www.isdadocs.org/researchnotes/pdf/ISDA-Research-Notes3.pdf>.

⁴³ *Id.* at 12.

⁴⁴ Andrew Lumsden & Saul Fridman, *Proxy Voting and Vote Selling*, 61 KEEPING GOOD COMPANIES J. CHARTERED SECRETARIES AUSTL. LTD. 332 (2009), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1431222.

⁴⁵ Onnig H. Dombalagian, *Can Borrowing Shares Vindicate Shareholder Primacy?*, 42 U.C. DAVIS L. REV. 1231, 1236 (2009), http://lawreview.law.ucdavis.edu/issues/42/4/articles/42-4_Dombalagian.pdf.

⁴⁶ Yesha Yadav, Abstract, *The Case for a Market in Debt Governance*, 67 VAND. L. REV. 771 (2014), <http://www.vanderbiltlawreview.org/2014/05/the-case-for-a-market-in-debt-governance/>.

⁴⁷ Andrés Danis, *Do Empty Creditors Matter? Evidence from Distressed Exchange Offers*, MGMT. SCI. (forthcoming), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2001467&download=yes.

⁴⁸ Marti G. Subrahmanyam, Dragon Yongjun Tang & Sarah Qian Wang, *Does the Tail Wag the Dog? The Effect of Credit Default Swaps on Credit Risk* (H. K. Inst. for Monetary Research, Working Paper No. 29, 2012), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2192351.

⁴⁹ Nils Henrik Gjøstøl Aspeli & Kristoffer Riis Iden, *The Empty Creditor Hypothesis: An*

suggests that CDSs can be welfare enhancing but in equilibrium lenders may over-hedge.⁵⁰ Ashcraft and Santos find no evidence that CDSs lower the cost of debt financing for average borrowers; however, there is a small positive effect for “transparent and safe firms.”⁵¹ In another paper, Oehmke and Zawadowski argue that the introduction of CDSs raises bond prices only if there is a large difference in liquidity and between CDSs and the underlying bonds.⁵² However, Darst and Refayet find that covered CDSs lower borrowing costs for companies, whereas naked CDS raise borrowing costs.⁵³

III. THE TWO LIMBS OF THE ECH

The first thing that needs to be established is that the ECH does indeed consist of two distinct claims. The two limbs can be summarized as follows:

- i) *The economic problem*: An “economic ownership may want to push a company into bankruptcy,” rather than agree to a restructuring, “because the bankruptcy filing will trigger a contractual payoff on its . . . swap position.”⁵⁴
- ii) *The legal problem*: “Both loan contracts and bankruptcy laws are premised on the assumption that creditors are averse to downside risk, but otherwise have an economic interest in the company's success and will behave accordingly.”⁵⁵

The differences between these two claims seems rather self-evident. However, some commentators—Hu and Black included—appear to not always appreciate the difference between the two. For instance, Hu and Black mix

Empirical Study of the Effects of Credit Insurance on the Choice between Bankruptcy and Private Restructuring (Spring 2010) (unpublished M.Sc. thesis, The Norwegian School of Economics and Business Administration) (on file with NHH Brage), <http://brage.bibsys.no/xmlui/handle/11250/168457>.

⁵⁰ Bolton & Oehmke, *supra* note 18.

⁵¹ Adam B. Ashcroft & João A. C. Santos, Has the Credit Default Swap Market Lowered the Cost of Corporate Debt? (July 2007) (unpublished manuscript) (on file with Federal Reserve Bank of New York), http://www.ny.frb.org/research/staff_reports/sr290.pdf.

⁵² Martin Oehmke & Adam Zawadowski, *Synthetic or Real? The Equilibrium Effects of Credit Default Swaps on Bond Markets*, REV. FIN. STUD. (forthcoming 2015) (manuscript at 19), <https://www0.gsb.columbia.edu/faculty/moehmke/papers/OehmkeZawadowskiCDSvsBonds.pdf>.

⁵³ Matthew Darst & Ehraz Refayet, The Impact of CDS on Firm Financing and Investment: Borrowing Costs, Spillovers, and Default Risk (June 30, 2014) (unpublished manuscript) (on file with authors), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2271685.

⁵⁴ Hu & Black, *Governance and Systemic Risk Implications*, *supra* note 7, at 682.

⁵⁵ *Id.* at 683.

examples of creditors complaining that valuation of bankruptcy assets is too high (the economic problem)⁵⁶ with examples of how a target company's management used stock lending to gain voting rights (the legal problem) within an M&A transaction.⁵⁷ As mentioned in the introduction, in principle there is nothing wrong with having the same name for both issues, as long as there is no confusion between them. However, this does not always seem to be the case. For instance, ISDA defines the ECH as the claim that "creditors who hedge their exposure [to a firm] will be indifferent to [the] firm's survival."⁵⁸ This definition only covers the economic problem, completely bypassing the legal problem. Even if ISDA's intention was to focus solely on the economic problem, there should have been at least an acknowledgment that there are two limbs to the ECH. Another example is Bolton and Oehmke.⁵⁹ Their article deals only with the economic aspects of ECH, without acknowledging that their discussion is limited to only one part of the ECH.⁶⁰ Even in their policy discussion, there is no mention of the legal problem.⁶¹ The problem with doing this is that one may draw the erroneous conclusion that because one has solved one limb of the ECH that the other one is not a problem either. However, it is perfectly possible for the economic problem of the ECH to be an issue but the legal problem not to be or vice versa.

One may be tempted to argue that the two limbs of the ECH are not really distinct—that the economic problem is merely a special case of the legal problem (i.e. it is only because the insolvency rules and corporate law are based on the wrong assumption that it allows creditors to exploit CDS to the detriment of the borrower). However, this argument conflates the issues of changing incentives and how the law should deal with changing incentives. There is, of course, overlap between the two, however, making the distinction is simply a helpful conceptual tool, nothing more and nothing less.

IV. THE ECH AS AN ECONOMIC PROBLEM

The ECH economic problem is that CDSs create the wrong incentives for creditors.⁶² Empty creditors are indifferent towards lenders in a socially sub-optimal way—putting healthy companies into bankruptcy, or during bankruptcy,

⁵⁶ Hu & Black, *Importance and Extensions*, *supra* note 7, at 733.

⁵⁷ *Id.* at 647.

⁵⁸ Mengle, *supra* note 42, at 1.

⁵⁹ Bolton & Oehmke, *supra* note 18.

⁶⁰ *See id.*

⁶¹ *See id.*

⁶² See Hu & Black, *Governance and Systemic Risk Implications*, *supra* note 7, at 682.

voting for actions that minimise rather than maximise the value of a company).⁶³ In the extreme, creditors may not only be indifferent towards a company, but may actually benefit from the company losing value.⁶⁴ In totality this could be socially inefficient because i) bankruptcy proceedings are costly (therefore, from a societal point of view it should only be used if it cannot be avoided); ii) minimizing rather than maximizing the value of a company (in the worst case destroying a company) is inefficient because society as a whole has an interest in maximizing the value of all companies.⁶⁵ To analyse the economic problem more effectively, it is useful to subdivide them into the following claims: i) ECH pre-bankruptcy: describing how creditors behave before bankruptcy; and ii) ECH in-bankruptcy: describing how creditors behave during bankruptcy.⁶⁶ The ECH in-bankruptcy is rather implausible, because it fails to take into account how CDSs are settled.⁶⁷ According to ISDA:

Once a firm files for bankruptcy, a credit event has occurred and the credit default swap settlement process begins

. . . . Under cash settlement, which is now the standard method of credit default swap settlement, protection sellers pay the loss amount to buyers. The loss amount is the par value of the defaulted bonds minus the value of the bonds determined from a settlement auction. . . . The auction procedure includes safeguards, . . . to deter aggressive bidding to manipulate the auction results. . . . There is no requirement for delivery of the defaulted bond. Once settlement occurs, the credit default swaps on the defaulted bonds terminate so there is no further possibility of compensation under the contracts.⁶⁸

Therefore, it seems very unlikely that the ECH in-bankruptcy is a widespread problem because after a default is called, the incentives that create empty creditors disappear. As it was pointed out by Baird and Rasmussen, “[c]redit default swaps create a moral hazard problem only before Chapter 11 begins and then in its immediate aftermath.”⁶⁹ ECH pre-bankruptcy, on the other hand, has some intuitive appeal. It seems obvious that creditors who are fully protected through CDSs behave differently than creditors who are not. A similar

⁶³ *See id.*

⁶⁴ *See id.*

⁶⁵ *See* Mengle, *supra* note 42, at 12.

⁶⁶ *See* Mengle, *supra* note 42, at 7. A similar classification was also made by the ISDA. *Id.* One could make the further distinction to separate empty creditors who are merely indifferent towards the fate of a company from creditors who benefit from a company losing value. *See id.* This article will however group them together as one category.

⁶⁷ *See id.*

⁶⁸ *Id.* at 12.

⁶⁹ Bolton & Oehmke, *supra* note 18, at 2647 (quoting Baird & Rasmussen, *supra* note 37).

argument could be made for many other financial products, such as insurance. In the insurance world, it is a common phenomenon that insurance changes the behaviour of the insured.⁷⁰ However, the insurance industry has developed ways to either address this problem, price it in the policy, or simply refuse to offer that product.⁷¹ It seems counterintuitive, or at least a bit surprising, that the CDS industry—an industry that in 2007 had “gross notional amounts outstanding . . . [of] USD 60 trillion”⁷²—would be completely oblivious to this problem.

A. *Theoretical Evidence*

In situations of conflicting intuitions, it is sometimes helpful to use a formal model. A very natural objection to the ECH is to argue that CDSs that would turn a creditor into an empty creditor should be priced so highly that it would not be profitable for a lender to buy such CDSs. It seems irrational for a CDS seller to sell a CDS under which he is almost certain to have to pay out. However, Bolton and Oehmke present a model in which empty creditors may happen in equilibrium.⁷³ What follows is a short description of their model; however, for more details the reader is invited to consult their original article.⁷⁴

The key feature of their model is that CDSs act as a commitment device by the lender not to accept a low amount in debt restructuring negotiations.⁷⁵ This results in CDSs having welfare enhancing effects because they increase companies' pledgeable income.⁷⁶ However, in equilibrium over-hedging by lenders will occur.⁷⁷ Thus, the overall welfare effect is ambiguous.⁷⁸ The crucial insight for the purpose of this article is that the breakdown of negotiations between lender and borrower may occur in equilibrium.⁷⁹ In their model, the CDS buyer chooses a CDS payout (π) of either high ($\pi = C^H$) or low ($\pi = C^L$).⁸⁰ Debt renegotiations between lender and borrower break down when the

⁷⁰ See GEOFFREY CLARK, *BETTING ON LIVES: THE CULTURE OF LIFE INSURANCE IN ENGLAND, 1694–1775* 15 (1999).

⁷¹ Some insurance products that are thought of as benign nowadays faced a similar criticism as CDSs do today. See *id.*

⁷² Christian Weistroffer, *Credit Default Swaps: Heading Towards a More Stable System*, DEUTSCHE BANK RES. (Deutsche Bank Research, Frankfurt am Main, Ger.), Dec. 21, 2009, at 1, <http://beta3.finance.sj/upload/poopmezajebava/poopmezajebava4b30c8deea20a/deutscheCDS.pdf>.

⁷³ Bolton & Oehmke, *supra* note 18.

⁷⁴ See *id.*

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ *Id.*

lender chooses C^H ; however, the cash flow (F) generated by the borrower is low but still positive (i.e. $C^H > F > 0$).⁸¹ In this situation, it would be socially beneficial if lender and borrower would renegotiate a debt restructuring (because $F > 0$), but the lender will receive a higher payout by not restructuring the debt and having the negotiations break down.⁸² In the Bolton and Oehmke model, under certain circumstances, it is rational for the CDS buyer to choose C^H even if the CDS is priced in an actuarial accurate way (i.e. the seller factors into the CDS premium that C^H will increase the likelihood of debt renegotiations to break down).⁸³ However, the Bolton and Oehmke model makes the crucial assumption that CDS sellers remain passive throughout.⁸⁴ When the negotiations between the lender and the company are about to break down, the CDS seller has two options.⁸⁵ The CDS seller can either (i) make up the difference (i.e. provide the borrower with the necessary funds to cover $C^H - F$); or (ii) buy the underlying debt from the borrower.⁸⁶ To buy the debt, the CDS seller must offer at least C^H to the lender.⁸⁷ In the subsequent debt renegotiations, the CDS seller will be able to recover $q_{CDS} F^L$ (where q_{CDS} represents the bargaining power of the CDS seller), giving the CDS seller a net position of $C^H - q_{CDS} F^L$.⁸⁸ Thus, as long as $q_{CDS} F^L > 0$, this is a profitable strategy.⁸⁹ However, there is a lack of real world examples of CDS sellers actually engaging in the buying of the debt.⁹⁰ Bolton and Oehmke offer the possibility that transaction costs might be too high; they state:

It is an open question whether this—CDS sellers buying the underlying debt—is the case because protection sellers are not taking a sufficiently active role to avoid inefficient defaults due to empty creditors, or whether there are other difficulties, such as locating the holders of the debt, that prevent this intervention in practice.⁹¹

However, transaction costs are unlikely to offer a satisfactory explanation. After all, the CDS buyer needs to contact the CDS seller to get a payout; thus,

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.* at 2649.

⁹¹ *Id.*

the reverse should also be possible. CDS sellers know who the CDS buyers are when the contract is entered into, and it does not seem too costly for the CDS seller to maintain a register with the contact details of the CDS buyer. The CDS seller could also insist on a clause in the contract that the CDS buyer must inform the CDS seller when debt negotiations are started, and the CDS buyer must offer the CDS seller the option to buy the debt before she can get a payout C^H . These provisions could be implemented relatively easily; however, the fact that they are not commonplace suggests that something else is going on. The problem with Bolton and Oehmke's model is that they assume that setting the CDS payout to C^H is credible. However, in situations in which the CDS seller buys the underlying debt, the borrower knows that she will *de-facto* never negotiate with the lender but with the CDS seller instead. Therefore, the highest possible CDS payout is $C^H = q_{CDS} F^L$, which means that $C^H - q_{CDS} F^L = 0$. This result has two implications. First, it suggests why there is a lack of real world examples of CDS sellers buying the underlying debt. In equilibrium, the CDS seller will be indifferent between buying the debt and paying out under the CDS. If one assumes that there are small costs involved in buying the debt, the CDS seller is better off paying out under the CDS. More importantly, for the purpose of this article, debt renegotiations do not break down in equilibrium. As $C^H = q_{CDS} F^L$, the borrower has enough cash to pay the lender even in case the cash flow is low. In this analysis, the purpose of CDSs is not so much to act as a commitment device, but to enable a low bargaining power lender to use the bargaining strength of a high bargaining power entity. In this analysis, CDSs are nothing else but a put option on the debt (which is, of course, not a novel idea).⁹² However, CDSs derive their value (or social purpose) not only from their risk mitigating function or ability to lower transaction costs but because they allow the 'renting' of bargaining power.

There are at least two possible objections to this analysis: (i) one could argue that if this analysis was true, then it is potentially more profitable for the high bargaining strength institution to invest in the debt in the first place rather than writing CDSs; and (ii) it is implausible to assume that CDS sellers have a higher bargaining strength than CDS buyers, especially if one considers that the largest group of buyers and sellers of CDSs are the same type of institution—banks.⁹³ It seems more plausible to assume that on average all banks have

⁹² See, e.g., Rahul Bhattacharya, *A Credit Default Swap (CDS) is a Proxy for a Put Option on the Assets of a Firm*, RISK LATTE (Oct. 5, 2008), http://www.risklatte.com/Articles/Quantitative_Finance/QF100.php.

⁹³ David Mengle, Head of Research, Int'l Swaps & Derivatives Ass'n, Inc., Presentation at Federal Reserve Bank of America Financial Markets Conference, *Credit Derivatives: An Overview* 45 (May 15, 2007), <https://www.frbatlanta.org/news/conferences/2007/financial-markets-conference/agenda.aspx>.

similar bargaining strength. Also it would appear impossible for an institution to be a buyer and seller of CDS at the same time. Regarding the first objection, there are numerous advantages for the high bargaining strength institution to sell the CDSs rather than to buy the debt, including that: no capital has to be advanced to the borrower;⁹⁴ no costs are incurred for originating the loan; and no costs are incurred for making the loan. The point is that CDSs allow an institution to use its bargaining strength without having to make a loan. Regarding the second objection, the analysis does not assume that the banks cannot have the same bargaining strength on average; one bank can have a high bargaining strength vis-à-vis one lender but a low bargaining strength vis-à-vis another lender. For instance, a bank might find it difficult to take a tough line against certain lenders (e.g. lenders that give a lot of other business to the bank and can threaten to take that business away) but easy to be tough with lenders which have no other connection to the bank. This also means that it is possible for a bank to be simultaneously a buyer and seller for CDS.

Another thing to note about this analysis is that the welfare enhancing effect of CDSs (i.e. increasing a company's pledgeable income) still persists, albeit arguably to a lesser extent. In Bolton and Oehmke's model, it is possible for the lender to choose the CDS payout of $\pi = C^H$. However, according to this article the highest payout is $\pi = q_{CDS} F^L$. Welfare could potentially be enhanced if it was possible to set to $\pi = C^H$. This opens up the possibility for regulatory intervention. However, this is just a possibility; it needs to be shown that it is actually worthwhile.

Bolton and Oehmke's model also has the weakness of being restricted to only two time periods. This is a potential issue because it could be the case that certain lenders are concerned about not developing a reputation of behaving like empty creditors. This claim gains plausibility if one considers what type of institution buys CDSs. According to the British Bankers Association, the percentage distribution of CDSs by institution in 2006 was as follows:⁹⁵

Institution	2000	2002	2004	2006
Banks*	81%	73%	67%	59%
Insurers	7%	6%	7%	6%
Hedge funds	3%	12%	16%	28%
Pension funds	1%	1%	3%	2%
Mutual funds	1%	2%	3%	2%

⁹⁴ However, if the CDS seller is a bank, then presumably it must hold capital against the CDS.

⁹⁵ Mengle, *supra* note 93, at 45.

Corporates	6%	4%	3%	2%
Other	1%	2%	1%	1%

*includes securities firm

Although the share of hedge funds as CDS buyers is increasing, banks remain the dominant buyers. Banks are also in the business of originating loans; if they take an unreasonably hard line against borrowers, they would find it increasingly difficult to originate loans. This provides a natural incentive for banks not to behave like empty creditors.

However, it is important to point out that the sole purpose of a CDS cannot be to increase the bargaining strength of the lender. If that was the case, CDSs that do not include voluntary restructuring as a credit event could never exist. Although such CDSs are less common, they do exist.⁹⁶ Therefore, other explanations for the existence of CDSs—such as reducing transaction costs or preserving the relationship between lender and borrower—must also apply. Lastly, Bolton and Oehmke's model does not deal with naked CDSs or how naked and covered CDSs interact. However, some caution is in order before one concludes that empty creditors are not a problem. At the heart of the economic problem of the ECH is the notion that CDSs are something that lenders and borrowers cannot contract on. In other words, the lender cannot commit that she will not enter into a CDS written on the borrower. This seems to be a clear case of potential inefficiency: a borrower may not want the lender to enter into a CDS for whatever reason and be willing to pay the lender for not entering into the CDS. However, it is impossible for the lender to commit to this. This article is not denying that there is the potential for inefficiency; rather, the argument is that this potential inefficiency is unlikely to be significant enough to justify regulatory intervention. After all, there are all sorts of products that the market does not offer, but only in a few instances is it deemed necessary to intervene.⁹⁷

B. Empirical Evidence

Theoretical models, as per previous sections, always face the problem of being just that—a theoretical possibility rather than an actual description of reality. Thus, it is important to analyse the empirical evidence for empty creditors. Unfortunately, there is no straightforward empirical method of testing

⁹⁶ Antje Berndt, Robert A. Jarrow & ChoongOh Kang, *Restructuring Risk in Credit Default Swaps: An Empirical Analysis*, 117 *STOCHASTIC PROCESSES & THEIR APPLICATIONS* 1724 (2007), <http://www.sciencedirect.com/science/article/pii/S0304414907000889>.

⁹⁷ For instance, the market does not offer an insurance product that covers the costs of bringing up a child in case of unwanted pregnancy, although arguably there could be demand for it.

the ECH. Hu and Black acknowledge that rather than relying on thorough empirical analysis they “rely instead—less satisfactorily—on possibilities, rumours, practitioner articles (which often don’t name particular instances), and conversations with bankruptcy lawyers, bankruptcy judges, and other knowledgeable market participants.”⁹⁸ One of the difficulties of testing ECH empirically is that historically there was no general obligation to report CDSs.⁹⁹ This makes it difficult to ascertain which creditor has CDS protection and which creditor does not. Therefore, one cannot simply compare a sample of creditors with CDS protection to creditors without CDS protection and observe differences. This point was noted by Danis: “As econometricians, we only observe if a firm has CDS contracts traded on its debt [the problem is that] some CDS investors might not be among the bondholders of the firm. In order to test ECH one needs to rely on proxies, which make the analysis inherently noisy.”¹⁰⁰

ISDA argues that if the ECH were true, “one would expect that, the correlation between number of defaults and restructurings as a percent of defaults should be lower when credit default swaps are available than when they are not.”¹⁰¹ However, ISDA finds that in their entire sample period the correlation is 9%, but after 2003 (when according to ISDA the period of liquid CDSs started) the correlation jumps to 90%, which is the exact opposite of what one would expect if the ECH were true.¹⁰² However, ISDA itself points out that its data set is rather small¹⁰³ and “omits any other factors that may explain the results.”¹⁰⁴ Nevertheless, although ISDA’s analysis is certainly not without shortcomings, it lends support to the notion that the ECH is false.

Danis conducted an empirical study of the ECH and found evidence supporting it¹⁰⁵, whereas Aspeli and Iden’s empirical study found none.¹⁰⁶ Danis considers a sample of “80 exchange offers, with data on 210 involved bonds.”¹⁰⁷ This analysis is based on two important assumptions. First, it assumes that “the amount of CDS protection held by bondholders is exogenous.”¹⁰⁸ Second, it assumes “that the CDS dummy is a good proxy variable for the CDS insurance

⁹⁸ Hu & Black, *Governance and Systemic Risk Implications*, *supra* note 7, at 679.

⁹⁹ However, this is likely to change with the implementation of Dodd-Frank Title VII and the EMIR in the United States and to a lesser extent the MiFID II in Europe.

¹⁰⁰ Danis, *supra* note 47, at 5.

¹⁰¹ Mengle, *supra* note 42, at 8.

¹⁰² *Id.*

¹⁰³ *Id.* at 9.

¹⁰⁴ Aspeli & Iden, *supra* note 49, at 6.

¹⁰⁵ Danis, *supra* note 47.

¹⁰⁶ Aspeli & Iden, *supra* note 49.

¹⁰⁷ Danis, *supra* note 47, at 3.

¹⁰⁸ *Id.* at 15.

ratio of bondholders.¹⁰⁹ Even Danis admits that this result is only of limited use because of the exogeneity assumption.¹¹⁰ To relax this assumption, Danis uses “the introduction of the Big Bang protocol in April 2009 as a natural experiment”¹¹¹ and compares the periods before and after April 2009. Before April 2009, depending on the choices made by the parties, an out-of-court voluntary restructuring could have been included in the definition of credit event in the contract governing the CDSs. After April 2009, restructuring was not a credit event any more under the ISDA Master Agreement for Standard North American Corporate transactions.¹¹² Therefore, if the ECH is true, one would expect that after April 2009 empty creditors would be a more severe problem than before, and this is exactly what Danis has found.¹¹³ Thus, *prima facie*, this seems to support ECH. However, implicit in Danis’s analysis is the assumption that restructuring before April 2009 was not only a theoretical possibility of triggering CDS but a realistic way to trigger the CDS. But this was not the case. According to ISDA, the scenario was as follows:

Although restructuring was a standard credit event for credit default swaps in North America until April 2009 (Mahadevan 2009)¹¹⁴ and still is in most other markets, out-of-court restructurings as discussed here have not triggered credit default swaps. The primary reason is that the ISDA documentation provides that a restructuring credit event must bind all holders; the terms of the restructurings mentioned in this article, in contrast, were binding only on those investors that accepted the terms.¹¹⁵

Danis’s analysis seems to conflate two distinct concepts, namely the existence of a clause in a contract and the effect of the clause. He writes that there are “empirical observations that many CDS contracts used the Modified Restructuring clause prior to April 2009”¹¹⁶; however, the only evidence he shows in his paper is that, “[a]ccording to estimates by Markit, when the Big Bang protocol was introduced, 68.5% of North American contracts contained the ‘Modified Restructuring’ clause (restructurings are credit events), while 27.1% contained the ‘No Restructuring’ clause.”¹¹⁷ What Danis means by “CDS

¹⁰⁹ *Id.*

¹¹⁰ *Id.* at 21 (“The previous section assumes that the cross-sectional variation in the CDS dummy is exogenous. This might be violated if there are omitted variables that explain participation rates in distressed exchange offers and are correlated with the CDS dummy.”)

¹¹¹ *Id.* at 4.

¹¹² *Id.*

¹¹³ *Id.* at 27.

¹¹⁴ Mengle, *supra* note 42.

¹¹⁵ *Id.*

¹¹⁶ Danis, *supra*, note 47, at 18.

¹¹⁷ *Id.* at 23.

contracts used the Modified Restructuring clause”¹¹⁸ is that contracts contained the clause rather than the clause was actually used.¹¹⁹ If ISDA is right, then restructuring was not really a credit event, even before April 2009. Therefore, using the change in the definition of credit event as a natural experiment to test ECH, the way Danis has done, does not work.

Aspeli and Iden test a sample of 218 distressed debt restructurings in the U.S. between 1995 and 2010 using Gilson’s¹²⁰ sampling methodology by identifying financially distressed firms by their poor stock price performance.¹²¹ Their conclusion is that:

[f]irst and foremost, we find no evidence for [the] hypothesis . . . that the presence of credit default swaps on a firm’s debt reduces the likelihood of a successful private restructuring. The effect of credit insurance is insignificant in all our regressions¹²²

Aspeli and Iden methodology has its shortcomings as they are ready to admit. For instance, they use a dummy variable, which takes the value 1 if the company is a CDS reference entity and 0 if it is not. The problem is “[t]he dummy variable that [they] employ in [their] regressions may simply be too broad a measure to pick up any effect that credit insurance has on the negotiations between creditors and debtors.”¹²³ The other problem is similar to the one faced by Danis and is the endogeneity of the variables. To test for this, they use a two-stage instrumental variable (IV) estimator, and they conclude that “any (potential) endogeneity problems inherent in our analysis remain unsolved.”¹²⁴

Subrahmanyam, Tang and Wang also test for the ECH and find evidence for it arguing that “finding is robust to controlling”¹²⁵. They “construct a model to predict CDS trading for individual firms. This model allows [them] to measure the treatment effect of CDS inception using an instrumental variable (IV) approach, run a propensity score matching analysis for firms with and without CDS trading, and conduct a difference-in-difference estimation” finding

¹¹⁸ *Id.*

¹¹⁹ Rather than only focusing how many contracts contained a restructuring clause, the empirical analysis should have used the number of occasions in which restructuring triggered a CDS.

¹²⁰ Stuart C. Gilson, Kose John & Larry H.P. Lank, *Troubled Debt Restructurings: An Empirical Study of Private Reorganization of Firms in Default*, 27 J. FIN. ECON 315 (1990), http://www.hbs.edu/faculty/Publication%20Files/Troubled%20Debt%20Restructurings_40d4a53b-5ecb-478e-88d1-d6dc1498e14d.pdf.

¹²¹ Aspeli & Iden, *supra* note 49, at 7.

¹²² *Id.* at 54.

¹²³ *Id.*

¹²⁴ *Id.* at 60–61.

¹²⁵ Subrahmanyam, Tang & Wang, *supra* note 48.

a “positive relationship between CDS trading and bankruptcy risk remains significant, even after controlling for the selection and endogeneity of CDS trading.”¹²⁶ Their methodology is quite sophisticated, but their conclusion is not as clear cut as it may seem. They find that a company’s “leverage increases significantly after CDS trading begins”¹²⁷. This is consistent with the hypothesis that CDSs increase the pledgeable income of a company. They control for the increased leverage; however, they appear not to take account of the possibility that some risky projects could not be undertaken at all without CDSs. Thus, simply controlling for leverage might not be sufficient to ensure the robustness of the results. They also assume that “the market practice in CDS changed significantly in April 2009 due to the ‘Big Bang’ implemented by ISDA, including for example[,] the removal of restructuring as a standard credit event.”¹²⁸ As argued above, this assumption may not be warranted. Further, their methodology generally seems to equate the appearance of a term in a contract with that term actually providing a realistic option.¹²⁹ Also, on occasions their reasoning appears circular. They write:

Our data do not reveal the identity of individual CDS traders. Hence, we cannot directly observe the presence of individual empty creditors or their portfolio positions. Consequently, we have to make do with aggregate proxies for the inception of CDS trading as a (noisy) proxy for the potential influence of empty creditors. If we make the assumption that the presence of CDS implies a higher probability of empty creditors than among non-CDS firms, then our baseline finding is consistent with the empty creditor prediction.¹³⁰

This assumption is certainly not helpful if one denies that empty creditors exist. The conclusion they reach is that CDSs lead to more bankruptcies through what in their terminology they describe as the “leverage”, “tough creditor” and “coordination failure” channels.¹³¹ As discussed, the higher leverage is also consistent with the hypothesis that CDSs allow more leveraged projects to be undertaken. “Tougher creditors” is also consistent with the hypothesis that CDSs allow a low bargaining strength lender to “rent” the high bargaining strength of another institution.¹³² “Coordination failure” is at best an indirect consequence of CDSs. The point to note is that even if it could be established that there is a

¹²⁶ *Id.* at 3.

¹²⁷ *Id.*

¹²⁸ *Id.* at 9.

¹²⁹ They plot the number of different restructuring clauses used in CDS contracts between the years 1997 and 2009. *See id.* at 39. However, as discussed in relation to the Big Bang protocol, this does not take into account how these clauses were actually used in practice.

¹³⁰ *Id.* at 22.

¹³¹ *Id.* at 32.

¹³² High bargaining strength institutions need to be able to signal that they are tough.

causal link between CDSs and bankruptcy, it does not necessarily follow that empty creditors are a problem. If certain projects can only be financed if CDSs exist, then it somehow misses the point to classify them as empty creditors. Empty creditors are a problem if the dialogue between lenders and borrowers breaks down in circumstances where it should not have done so.

In conclusion, the empirical evidence for the ECH is inconclusive. However, one can expect that with introduction of derivatives reporting requirements (such as those contained in Dodd Frank Title VII in the US and the European Market Infrastructure Directive in Europe), data on CDSs will become more readily available, which should lead to more advances of the econometric analysis of the ECH. That being said, one should not necessarily conclude that derivatives reporting requirements will settle all questions regarding the ECH. For instance, the Bolton and Oehmke model, discussed above, suggests that in certain circumstances CDSs can be welfare-enhancing even if they lead to the breakdown of negotiations between borrower and lender. A statistical analysis that simply considers whether creditors with CDS protection favour bankruptcy over out-of-court debt restructuring would fail to capture the ex-ante efficiency improvement due the CDS. While it is very likely that there will be significantly improved statistical analysis of CDSs and the ECH available in the near- to mid-future, one should not necessarily count on all questions being answered.

On a purely intuitive level, it is also important to keep in mind the size of the CDS market. As noted by Deutsche Bank “[b]etween 2002 and 2007, gross notional amounts outstanding grew from below USD 2 trillion to nearly USD 60 trillion.”¹³³ In comparison, the value of the world’s financial stock was USD 212 trillion (USD 54 trillion equity and USD 158 trillion debt) in 2011.¹³⁴ The important point to note is that the CDS market is rather sizable in comparison to financial markets in general. This probably remains true, even if one takes into account that multiple CDS contracts cover the same reference entity¹³⁵; therefore, there may be some double counting in USD 60 trillion figure. Nevertheless, if empty creditors are indeed such a significant problem as Hu and Black claim, than one would expect more evidence for it. If the ECH was true, then the 30-fold increase in CDS notional between 2002 and 2007, to a level at which total CDS notional is larger than global equities, would be akin to a giant meteor hitting the markets. Like with a giant meteor, one would expect clear

¹³³ Weistroffer, *supra* note 72, at 1.

¹³⁴ CHARLES ROXBURGH, SUSAN LUND & JOHN PIOTROWSKI, MAPPING GLOBAL CAPITAL MARKETS 1 (McKinsey Glob. Inst. ed., 2011), http://www.mckinsey.com/insights/global_capital_markets/mapping_global_capital_markets_2011.

¹³⁵ Lynn A. Stout, Jean Helwege, Peter J. Wallison & Craig Pirrong, *Regulate OTC Derivatives by Deregulating Them*, REG., Fall 2009, at 30, <http://object.cato.org/sites/cato.org/files/serials/files/regulation/2009/9/v32n3-1.pdf#page=5>.

evidence of the impact.¹³⁶

V. THE ECH AS A LEGAL PROBLEM

As mentioned in the introduction, even if the economic problem of the ECH is insignificant, it does not necessarily follow that legal problem is insignificant. If it is true that current law and regulation is based on the assumption of unity of legal and economic rights, there may be a mismatch between the law and commercial practice, and this may produce suboptimal outcomes. This seems to be the opinion of Hu and Black, who write:

[D]ecoupling is occurring against the background of a corporate governance paradigm, contractual arrangements, equity and debt governance regimes, and legal rules which largely assume that shareholders and creditors hold bundled packages of rights and obligations.¹³⁷

This section will refer to the above as the *unity assumption*: the idea that equity and debt governance is based on the assumption of unity of legal and economic rights. This article makes two claims challenging the significance of the legal problem:

i) The "background of a corporate governance paradigm, . . . equity and debt governance regimes, and legal rules"¹³⁸ is not based on the unity assumption. In actuality, the corporate governance paradigm is to treat shareholders and creditors like a 'black box' – giving shareholders and creditors rights (and obligations) irrespective of their idiosyncratic characteristics, including their economic exposure to a company. This is because the rights the law gives to investors, vis-à-vis a company, are exclusively a function of the *benefits* which the investor provides to the company, not of the *loss* suffered by investors for providing this benefit.¹³⁹

ii) The law does not assume that investors in a company use their

¹³⁶ This is, of course, not to be taken as thorough analysis of CDSs, it is more an appeal to intuition.

¹³⁷ INSTITUTIONAL INVESTOR ACTIVISM: HEDGE FUNDS AND PRIVATE EQUITY, ECONOMICS AND REGULATION 380 (William W. Bratton & Joseph A. McCahery eds., 2015).

¹³⁸ *Id.*

¹³⁹ For instance, the law gives same rights to investors investing \$1,000 in a company, regardless of being a billionaire with a well-diversified portfolio, or an investor whose sole asset is the \$1,000 in such company.

legal rights (e.g. voting rights) to maximise the value of the company, in fact the law makes no assumption at all how investors use their legal rights.¹⁴⁰ In the rest of this article the assumption that investors vote to maximise the value of the company will be referred to as the ‘value maximising assumption.’

Contrary to what Hu and Black claim, CDSs do not undermine the background assumptions of corporate law. Rather, it would be contrary to the background assumptions of corporate law to take an investor’s derivative position into account when assessing what rights she should have in the company. It is important to realize what the argument in this section is and what it is not. The argument is not that law should or should not change because of CDS¹⁴¹; rather, the argument is solely that decoupling of legal and economic interests does not violate the background assumption of corporate law.

Hu and Black do not state exactly on what basis they claim that the law assumes unity of legal and economic interest. Instead, they seem to treat it as self-evident. However, one can certainly not find an explicit statement in a piece of legislation to that effect (and Hu and Black do not make the claim that such a statement can be found). Further, it would be futile to analyse every single piece of corporate or financial law and check on what assumptions it is based. In any case, Hu and Black probably had something different in mind when they talked about the background assumption of corporate law. They likely thought something along the lines of a ‘framework’ of corporate law (i.e. a set of assumptions or premises that allows one to explain or derive most—if not all—corporate law). Therefore, the strategy this article pursues is to analyse a suitable framework of corporate law and this will reveal the following:

- i) There was never a time when investors held legal rights in the same proportion as their economic exposure. This will not prove that law could not make this assumption, but will make it less likely that corporate law is based on the unity assumption.¹⁴²

¹⁴⁰ The law does forbid certain people from voting (e.g. a company voting its own shares held in treasury) and also may put certain obligations on some shareholders (e.g. fiduciary duty for majority shareholders). However, this is quite different from making a general assumption on how shareholders should vote.

¹⁴¹ See *supra* Part I.

¹⁴² This is the case because if investor indeed held their economic rights in proportion to their legal rights, then it would be reasonable to assume that the law assumed as much.

- ii) The concept of 'economic interest' is too vague to constitute a useful concept for the law. This compounds the unlikelihood that the law ever assumed it as the basis of corporate governance.
- iii) A framework in which all the rights and obligations investors have are exclusively a function of the benefit they provide to the company, enabling law to treat each investor like a 'black box' (this will be referred to as the 'black box theory') does a superior job in explaining existing equity and debt governance than other frameworks.

If the above claims can indeed be established then this means that the unity assumption and value maximising assumption were never part of the background assumption of corporate law. This in turn would mean that CDS do not violate the background assumptions.

Two issues must be clarified before analysing these claims. First, there may be a general objection that there is no such thing as a framework for corporate law, that corporate law is a hotchpotch of rules, not based on any coherent underlying assumptions (and one could add it is a splatter-gun outcome of lobbying efforts by interest groups). However, this article does not claim that the background assumption can explain every aspect of corporate law, only that it can explain key features of it. More importantly, if it is true that there are no background assumptions, then it automatically follows that Hu and Black's claim that CDSs violate the background assumptions is false, as there are no assumptions that CDSs can do so. Second, it should be noted that a substantial part of the discussion in this section will be based on shareholders rather than creditors. This is purely because the literature in this area largely focuses on shareholders. This focus on shareholders, however, does not pose any special problems for this article as the principles are the same for shareholders and creditors. As a shorthand, sometimes the discussion will only refer to the shareholder rights; thus, when the subsequent discussion makes reference to voting rights, this means either voting rights for shareholders or voting rights for creditors in relation to financial restructuring or insolvency proceeding. The relevant principles are the same for both (if the principles diverge this will be stated explicitly).

A. *Was There Ever Unity Between Legal and Economic Rights?*

Hu and Black seem to take it for granted that in the past investors held economic rights in proportion to the legal rights and it is only due to derivatives

that nowadays this might not be the case anymore.¹⁴³ Before delving into an analysis of the true historical position of legal and economic rights, it is useful to define what these rights are. Hu and Black do not provide a clear definition. They do, however, state that "[s]ome rights [shareholders have in a company] are not purely monetary, including voting rights, director fiduciary duties, rights to bring suits and inspect corporate records, and so on."¹⁴⁴ These rights can be thought of as legal rights. Within economic rights, Hu and Black include the following: "dividend, liquidation, and appraisal rights under corporate law"¹⁴⁵ Although not precise definitions, these provide a good indication of what legal and economic rights are, and the differences between them. Yet, it is quite clear that when Hu and Black talk about dividends as an economic right, they mean something wider than just receiving dividends. For instance, if investor *A* is under an obligation to pass on all dividends he receives from a company to investor *B*, then Hu and Black would probably argue that *A* does not have an economic interest in the company anymore. Thus, economic interest seems to be more like the general benefit or value that investor derives from her investment in the company. This is not a precise definition, however for the purpose of this article it is a good enough approximation.

The position of this article is that there never was a time when shareholders held economic rights in the same proportion as their legal rights.¹⁴⁶ To understand this, one needs to recognise that:

- i) an investor can change her economic interest in a company while holding her legal interest constant by many other means than through derivatives;
- ii) the value that an investor derives from her investment will depend on her legal rights in the company as well as her own idiosyncratic circumstances.¹⁴⁷ More importantly, investors value their investments within the context of their portfolio, and not in isolation.

¹⁴³ See, Hu & Black, *Governance and Systemic Risk*, *supra* note 7, at 664. "These assumptions [i.e. the unity assumption] can no longer be relied on." *Id.* This strongly indicates that Hu and Black think that in the past the unity assumption could be relied on, most likely because shareholders' economic interests were proportionate to their legal interest.

¹⁴⁴ *Id.* at 633.

¹⁴⁵ *Id.*

¹⁴⁶ It is possible for an investor to hold legal and economic interest in the same proportion; however, if that happens, it is pure coincidence.

¹⁴⁷ Idiosyncratic circumstances would include things like tax position, liabilities, liquidity needs, risk tolerance, investment horizon, etc.

Both observations mean that different investors will have different legal interests, despite them having the same legal interest. The first claim is relatively straightforward to see. An investor who has two different financial instruments, has a different economic interest in each instrument than another investor who only holds one of these instruments (provided the two instruments are not perfectly correlated). Hu and Black appear to operate under the assumption that the only way an investor can change her economic exposure to a company is through derivatives. Yet, any financial instrument that exhibits some form of correlation with the fortune of the company will change the investor's economic exposure to that company. If this was not true, an investor who holds positions in two companies, which have returns that are perfectly negatively correlated, would have unity of legal and economic rights, but an investor who has all her savings in one company as well as a small derivatives position to protect her from downside risk violates the unity assumption. This appears to be an absurd conclusion. One may counter this argument by claiming that investors usually invest in only one company; therefore, portfolio construction is not an issue for most investors. However, apart from it being probably factually wrong, this overlooks the fact that diversification is a fundamental aspect of investing.¹⁴⁸ Even if one disagrees that the value of an investment to an investor depends on things like tax, liquidity needs, age (in case of a natural person) to value an investment, it is very difficult to argue that the value of an investment is independent from other investments held, and most investors prefer a diversified portfolio to holding a single investment. However, diversification is really just a different way of "hedging" individual investments.¹⁴⁹ Hu and Black believe that before the advent of derivatives, there was perfect (or at least very close) correspondence between legal and economic interests before derivatives. Yet even without derivatives the unity assumption would not be satisfied. This observation also suggests why the proposal of allocating voting rights according to economic interest is problematic.¹⁵⁰ This allocation would require a

¹⁴⁸ See SEC. & EXCH. COMM'N, BEGINNERS' GUIDE TO ASSET ALLOCATION, DIVERSIFICATION, AND REBALANCING (2009), <http://www.sec.gov/investor/pubs/assetallocation.htm>.

¹⁴⁹ For instance, an investor may invest in an oil exploration company and a renewable energy company to hedge the position.

¹⁵⁰ See Martin & Partnoy, *supra* note 36, at 19; see also Hu & Black, *Importance and Extensions*, *supra* note 7 at 735 ("Beyond disclosure, debt contracts may need to adjust to the new world of hedged interests, voting rights in bankruptcy may need to be based on net economic ownership instead of gross ownership of debt, and the extra complexities in devising sensible voting rules may provide support for proposals to rely more on auctions."). However, it is important to point out that Hu and Black generally prefer a disclosure based solution to the empty creditor problem and seem to advocate changing in voting rights only in extreme circumstances. See *id.* at 734.

determination of each investors' economic interest. Hu and Black seem to think that this is easy because they probably assume that it is just a matter of netting out long and short positions. In reality, even restricted to the relatively simple analysis of an investor's portfolio, determining an investor's economic interest can be very difficult. One issue is ascertaining how two positions are correlated and to what extent they provide a hedge for each other. Consider the case of an investor who invests in company *A*, an oil exploration company, and company *B*, a renewable energy company. These two positions could exhibit some negative correlation and provide a hedge for another. Thus, if voting rights are based on economic interest, the investor should have less voting rights in company *B* for instance. However, how the investors voting rights should be reduced would depend on a complex (and probably subjective) calculation about the return correlation between company *A* and *B*. The example could be further complicated if, for instance, the investor is based in France, the oil exploration company operates in the US and the renewable energy company in Germany, and the investor's intention is to hedge his Euro exposure by investing in company *A*, which operates in US dollars. It would be very difficult to objectively ascertain the exposure the investor has to company *A* and the voting rights to which the investor is entitled. Simply netting long and short derivatives positions ignores the many different ways in which hedging can be achieved. This means that basing voting rights on economic exposure, would be a very complex undertaking to the extent that it would, probably be unworkable.

It may be the case that Hu and Black never meant to argue that in the real world the unity assumption was ever satisfied but rather that it was a useful legal fiction. One could, for instance, argue along the following lines: ideally, the law would provide rights to investor according to their economic exposure, because this will ensure that the voting rights will be exercised most efficiently. Yet, due to the reasons pointed out in the previous paragraph, this would be highly impractical. Therefore, to improve efficiency, the law invented the fiction that legal and economic interests coincide. This was the right assumption to make notwithstanding that investors used to hedge their positions because the hedging did not dramatically change the economic position of an investor. In other words, the individual economic exposure is only slightly different with a diversified portfolio, but with CDSs, it is radically different. This argument in favour of using the unity assumption as a legal fiction is not particularly strong. First, it is an open empirically questions how dramatically derivatives have changed the behaviour of investor as opposed to hedging by other means. Second, it does not explain what the benefits of making the unity assumptions are, and more importantly, it does not explain why the law had to assume anything at all. Third, arguing that the law used the unity assumption as a fiction (i.e. using it as if it was true although it clearly was not), could lead one to the

conclusion that decoupling is not a problem for the law because the law simply assumed unity but never expected it to apply to reality. In fact such a position is similar to one proposed by this article: the law allocates legal rights to investors regardless of their economic rights. The only difference would be that in the latter case the law acknowledges that it does not inquire into an investor's economic interests, whereas in the former case the law says that it does make this inquire, however, using a fiction.

In conclusion, this section suggests that the unity assumption has never been satisfied, even in absence of derivatives. Furthermore, there are no other good reasons that the law should use the unity assumption as a legal fiction. It follows that it is unlikely that the law ever made the unity assumption.

B. Investor Rights Are Based on the Benefits Received by the Company

The above section suggests that awarding legal rights in proportion to economic interest is undesirable because it is impractical.¹⁵¹ Nevertheless, basing rights on economic exposure is not only wrong for practical reasons, it is wrong in principle. Investor rights are based on the benefit they provide to the company, not the loss investors incurred by providing that benefit. Based on this principle, it follows that the law treats shareholders like a black box. Thus, it would be contrary to fundamental assumptions of corporate law if the law were to take into account an investor's economic interest. It is therefore irrelevant whether such interest is changed through derivatives or otherwise.

To make this claim, this article will use a contractual approach to corporate law, following the same methodology used by Judge Frank H. Easterbrook and Professor Daniel R. Fischel in their seminal work *The Economic Structure of Corporate Law*.¹⁵² It merely assumes that the contractual approach is appropriate and does not delve into the rationale as to why. As a brief indication of the appropriateness of this approach, however, one can appeal to efficiency by arguing that given otherwise equal options, the law will choose the more efficient option.¹⁵³ Applying this reasoning to the background assumptions of corporate law means that the law would not choose one set of assumptions if they lead to less efficiency than another set. This sentiment is also echoed by Easterbrook and Fischel.¹⁵⁴

¹⁵¹ This is essentially because the law cannot directly observe an investor's economic interest.

¹⁵² EASTERBROOK & FISCHEL, *supra* note 20, at 34.

¹⁵³ There is no need at this point to define precisely what "efficiency" means; however, it is something along the lines of "Pareto efficiency" (i.e. no one can be made better off without making somebody else worse off).

¹⁵⁴ "The role of corporate law here, as elsewhere, is to adopt a background term that prevails unless varied by contract. And the background term should be the one that is either picked by

To assess the efficiency of the background assumption, it is useful to consider which principles would have been chosen in a hypothetical bargaining situation. From a hypothetical bargaining situation, it seems to follow that the rights an investor¹⁵⁵ has vis-à-vis a company are solely a function of the benefits the company receives from that investor. Assume a group of people *G* with zero capital who aim to raise money for a project which costs \$*X* to implement, generating a net discounted cash flow of \$*Y* and $\$X < \Y - *prima facie* the project is worthwhile to undertake. In order to attract investments, *G* needs to offer something in return. To raise \$*X* efficiently, *G* will offer more to an investor from whom they receive more as opposed to an investor from whom they receive less. Although this is a trivial observation, the important point is that the reward that *G* will offer will be based on the capital provided towards the project, not on how much it costs the investor to provide the capital. *G* would not care if an investor has to re-mortgage his house to raise the money, or if an investor is a billionaire with a large well-diversified portfolio, if they invest the same amount. All that *G* cares about is raising \$*X*. One investor may invest all his assets into the project, another investor may only invest a fraction of her wealth. However, the amount invested relative to total assets of the investor is irrelevant—the only relevant amount is the actual amount invested. It would therefore be inefficient to distribute rights in the company according to how much it costs an investor to make the investment rather than the benefit the company receives. Any such rule advocating this would potentially require *G* to give more rights to an investor who invested all his assets in the company than to the billionaire investor's investment, even if the latter's investment is larger than the former. The only efficient rule, therefore, is a rule that distributes rights solely on the basis of the benefit received by the company.

This may seem like a rather trivial observation, and most commentators would agree that this observation explains why investors usually receive income (be it in the form of dividends, interest or capital appreciation) in proportion to capital contributed. However, more importantly, this also explains why most companies distribute voting rights according to capital contributed (i.e., the one-share-one-vote rule).¹⁵⁶ The one-share-one-vote rule ensures that a larger

contract expressly when people get around to it or is the operational assumption of successful firms." EASTERBROOK & FISCHER, *supra* note 20, at 36.

¹⁵⁵ For the purpose of this paper, it is not necessary to define exactly what an "investor" is; however, this article uses the term "investor" similar to stakeholder (e.g., shareholders, creditors, employees, suppliers, customer, etc.).

¹⁵⁶ In many jurisdictions, the one-share-one-vote rule is not mandatory (this article will explain later on why this is the case). However, the one-share-one-vote rule is widely used. See Renee B. Adams & Daniel Ferreira, *One Share, One Vote: The Empirical Evidence* (European Corp. Governance Inst., Finance Working Paper No. 177, 2007), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=987488##.

shareholder is more likely to have a company implement her preferences than a smaller investor. For instance, assume a risk-averse investor *A* with a portfolio heavily exposed to the US market. *A* invested in company *Z*, which faces a decision between two projects, a low-risk project in China (that would provide a natural hedge for the US market) and a high-risk project in the US. More voting rights for investor *A* makes it more likely that the Chinese project will be adopted, giving investor *A* more incentive to invest in the company in the first place. Thus, it is not only efficient to distribute the income of the capital according to capital contributed by the investors, but it is also efficient to do the same for voting rights. Voting rights are merely an additional mechanism to induce investments. This also explains why corporate law protects minority shareholders (e.g. fraud on the minority type rules in the UK,¹⁵⁷ or fiduciary type obligations on major shareholders in the US¹⁵⁸). A company will usually try to raise money not only from large investors but also from small investors.¹⁵⁹ If a company offers all rights in the company to a large investor, small investors would be very unlikely to invest in the company. Therefore, rules that award large shareholders more rights while at the same time protecting small shareholders (especially from their funds simply being appropriated by large shareholders or managers) are efficient. The important thing to note is that *large* and *small* shareholders is purely determined by the amount contributed to the company not by the loss incurred by the investor. The one thing the company will not do is to reward investors on the basis of their economic interest in the company.

One may object to this analysis by arguing that it mischaracterises the nature of a company by focusing exclusively on the initial fundraising stage; that the company is usually a long-term enterprise; and that the key point of corporate law is the long-term management of funds entrusted by investors to the company. Therefore, our company *G* will not only be interested in raising funds, but will also be interested in other characteristics of the investor that make such investor a good “match” for *G*. If a potential investor *A* mortgaged her house to buy the shares, she might be required to make monthly repayments, potentially creating problems. For example, imagine that there are two projects *X* and *Y*: project *X*

¹⁵⁷ See Chunyan Fan, *Challenging Controlling Shareholders in UK Courts: The Substantive Standard of Review*, DEFAULT J. 1, 4–5 n.29 (2008), http://www.rug.nl/research/portal/files/14458602/Paper_Chunyan_Fan.pdf; VICTOR JOFFE, *MINORITY SHAREHOLDERS: LAW, PRACTICE AND PROCEDURE* 2–3 (Butterworths Law 2000).

¹⁵⁸ See Keith H. Berk, Scott A. Josephson & Miriam Volchenboum, *Fiduciary Duties of Shareholders of Closely Held Corporations*, ILL. B.J., March 2010, at 148 n.3, http://www.hmblaw.com/media/10638/isba_20-20shareholder_20fid.pdf.

¹⁵⁹ Please note that, as used herein, large and small shareholders are purely determined by the amount contributed to the company not by the loss incurred by the investor.

pays out a regular monthly income stream, and project *Y* pays out after 10 years. *A* may well prefer *X* to *Y* although *Y* has a higher discounted cash flow, whereas the other investors may well prefer *Y* to *X*, and may be inclined to turn down *A* as an investor. CDSs can be viewed in a similar way. The fact that a potential investor is fully hedged may or may not be attractive to a company, depending on such company's individual circumstances. Therefore, according to this argument, it is wrong to state that a rule that bases investor rights on capital invested as well as economic exposure is always inefficient.

There are, however, a few counterarguments to this objection. Most importantly, this argument confuses the distinction between rules that should be enforced by law and rules that should be left to investors to determine amongst themselves. It is important to recognise that the rights the investor receives in the company are still ultimately based on the benefit the investor provides to the company. If an investor's preferences are less compatible with the preferences of the other investors, then that investor simply provides the same benefits to the company at a higher price. Thus, an investor's economic exposure is only relevant to a company in as far as it impacts the benefit the investor provides to the company. This may seem like a tautology; however, if one sees corporate law as the outcome of adversarial bargaining, then the relevant point of view is the one of the benefit provided to the company' rather than 'the costs incurred by the company. The question then becomes where the dividing line is between rules prescribed by law and rules, which investors can determine amongst themselves. This answer has been given by Easterbrook and Fischel in the idea that corporate law is an "economizing device":

Why don't law firms or corporate service bureaus or investment banks compile sets of terms on which corporations may be constructed? They can peddle these terms and recover the cost of working through all of the problems. Yet it is costly for the parties (or any private supplier of rules) to ponder unusual situations and dicker for the adoption of terms of any sort. Parties or their surrogates must identify problems and then transact in sufficient detail to solve them. . . . Court systems have a comparative advantage in supplying answers to questions that do not occur in time to be resolved *ex ante*. Common law systems need not answer questions unless they occur. *This is an economizing device*.¹⁶⁰ (emphasis added).

Therefore, the relevant question is which corporate contractual terms are more efficiently supplied by the law and which by the parties themselves. The law could, of course, provide highly complex prescriptive terms incorporating the economic exposure of each investor or alternatively provide high level

¹⁶⁰ EASTERBROOK & FISCHEL, *supra* note 20, at 35.

principles that deal with the economic exposure of each investor. The first approach would be very complex, yielding highly intricate rules. It is highly unlikely that rules made by judges or legislator would be a good substitute for the actual bargain among people. The other extreme of broad legal principles would yield very abstract rules, and it is not clear how this would enhance efficiency. Therefore, if the role of corporate law is indeed to produce standard terms, then it seems clear what the law should do. The law is able to produce simple standard terms by focusing exclusively on the benefits provided by each investor and by ignoring the costs to investors. If corporate law takes into account an investor's economic interest, then the law would produce rules that are so complex and tailored to specific situations that they would no longer be standard. Alternatively, if the law produces high-level abstract rules, they would no longer be efficient. Both alternatives would defeat the main purpose of corporate law. Thus, corporate law focuses on producing rules common to all corporate ventures (i.e. pooling of capital), all other idiosyncrasies are left the discretion of the parties involved.

An additional reason why the law focuses on capital invested as the determining factor for investor rights is fungibility and transferability of shares and bonds. Fungibility in relation to shares means each "shares of stock . . . are considered fungible in that each share represents the same economic interest in the issuer as any other share."¹⁶¹ This means that in order to be fungible, the same share (or any other financial instrument) must have the same rights attached regardless of who holds it¹⁶². Furthermore, transferability of shares would probably be restricted if the rights attached to them would vary depending on the holder of the shares.¹⁶³ Fungibility and transferability appear to be fundamental principles of corporate law, intrinsically linked to the idea that the only thing that matters in the determination of the legal rights an investor has vis-à-vis a company is the benefit that investor provides to the company.

To conclude this section, the following can be stated: Corporate law treats investors in a company like a black box. It gives them rights and obligations vis-à-vis a company solely based on the benefit provided, which will usually take

¹⁶¹ Jack Samet, *The Concept of Fungibility in Securities Laws*, 27 BUS. LAW 383 (1972).

¹⁶² The terminology here might be slightly confusing because Samet also uses the term "economic interest"; however, he uses it in a different way than this article uses it.

¹⁶³ This seems, however, to be an intuitive outcome. See Peter Z. Grossman, *The Market for Shares of Companies with Unlimited Liability: The Case of American Express*, 24 J. LEGAL STUD. 63 (1995). For what Grossman calls a "traditional perspective," see Paul Halpern, Michael Trebilcock & Stuart Turnbull, *An Economic Analysis of Limited Liability in Corporation Law*, 30 U. TORONTO L. J. 117 (1980). See also Grossman, *supra*, at 68 n.18 ("[Susan E. Woodward] argued . . . unlimited liability would impair the transferability of shares generally."). The discussion in these articles is about unlimited versus limited liability; however, the relevant principles can easily be extended to a general discussion of transferability of shares.

the form of capital¹⁶⁴ invested, not by the cost to the investor, unless there is specific legal rule that says otherwise.¹⁶⁵ The purpose of this discussion was to counter the argument that corporate law is based on the claim that the law assumes shareholders or creditors in a company hold economic rights in proportion to legal rights. Therefore, Hu and Black are wrong in their claim¹⁶⁶ that decoupling of legal and economic rights violates a basic assumption of corporate law.

C. *Which Theory Fits the Facts Better?*

The previous section gives abstract reasons for a theory that precludes corporate law from inquiring into the economic interest of investors. Apart from theoretical reasons, one should also try to ascertain if a theory has explanatory power. In order to do that, this section will compare the black box theory to another theory of corporate law, which would allow the law to inquire into the economic interest of investors. This theory is the one put forward by Easterbrook and Fischel in *The Economic Structure of Corporate Law*.¹⁶⁷ Easterbrook and Fischel's theory was chosen because this article uses the same methodology as Easterbrook and Fischel, which make both theories easily comparable. Further, Easterbrook's and Fischel's ideas, although not without their critics, have achieved "largely canonical"¹⁶⁸ status. Lastly, and most importantly, Easterbrook and Fischel's theory supports the view that the ECH is a very sophisticated and well thought-out manner. Thus, arguably, if the flaws in their theory are highlighted, then other theories should be relatively easy to deal with.

Easterbrook and Fischel argue that shareholders, or rather the group that receives the residual income of the firm, should have voting rights because receiving residual income provides the right incentive for voting.¹⁶⁹ From this, it seems to follow that they should not have voting rights anymore if their incentives change, for instance through derivatives. Easterbrook and Fischel's theory, like the black box theory, has adversarial bargaining as its starting point. From there, they take the position that votes should be distributed according to which group has the right incentives and assume that shareholders (and by

¹⁶⁴ Capital is to be understood broadly, encompassing financial capital as well as other forms of capital for instance the provisions of services or labor.

¹⁶⁵ For instance, competition law may intervene and stop a shareholder from enjoying certain rights.

¹⁶⁶ Hu & Black, *Importance and Extension*, *supra* note 7, at 739.

¹⁶⁷ EASTERBROOK & FISCHEL, *supra* note 20.

¹⁶⁸ Martin & Portnoy, *supra* note 36, at 4.

¹⁶⁹ EASTERBROOK & FISCHEL, *supra* note 20, at 68.

extension creditors) are a homogenous group¹⁷⁰ (referred to herein as the “homogeneity assumption”). Through the homogeneity assumption, all conflicts among shareholders disappear, and the only relevant conflicts left are those between different groups of stakeholders (e.g. shareholders, creditors, employees, managers, etc). In addition, the homogeneity assumption means that the only differentiating factor among all company stakeholders is how they relate to the company. It is only by assuming that the sole difference between a shareholder and a creditor is that the former receives the residual income of the company and the latter has a fixed claim that one can arrive at the conclusion that voting rights are based on whatever group has the best incentives for voting, as well as claiming that the law requires firms to maximise profits (besides their contrary claims earlier in their book)¹⁷¹. The difference between the black box theory and Easterbrook and Fischel’s theory is that according to the former, there is no direct¹⁷² connection between incentives and voting rights, while according to the latter, voting rights are given to the group of persons with the right incentives. From the former, follows that a change in incentives (e.g. by entering into a derivatives position) does not have an impact on voting rights, or any other rights. From the latter, a change in incentives can potentially change the allocation of legal rights. Conversely, apart from the homogeneity assumption, the black box theory is identical to Easterbrook and Fischel’s theory. In adversarial bargaining, if all shareholders are identical, they will not care about the distribution of voting rights because all shareholders would expect¹⁷³ their

¹⁷⁰ *Id.* at 70 (“The preferences of one class of participants are likely to be similar if not identical. This is true of shareholders especially, for people buy and sell in the market so that the shareholders of a given firm at a given time are a reasonably homogeneous group with respect to their desires for the firm So firms with single classes of voters are likely to be firms with single objectives, and single-objective firms are likely to prosper relative to others. This suggests not only why only one class holds the controlling votes at a time but also why the law makes no effort to require firms to adhere to any objective other than profit maximisation (as constrained by particular legal rules).”).

¹⁷¹ “An approach that emphasizes the contractual nature of a corporation removes from the field of interesting questions one that has plagued many writers: what is the goal of the corporation? Is it profit, and for whom? . . . Our response to such questions is: who cares?” *Id.* at 35–36.

¹⁷² Incentives have an indirect effect because they will determine the amount a person invests and the “amount of rights” a company needs to give up in order to get the investments. However, the crucial difference is that in the black box theory, all preferences are revealed in the amount invested; therefore, subsequent changes in the shareholder’s incentives do not change voting rights (or any other rights).

¹⁷³ The word *expected* is important here because it is reasonable to assume that Easterbrook and Fischel meant “homogeneity of shareholders” to mean “homogeneity of preferences” only, and not homogeneity in how much information shareholders have. Otherwise, they could not explain why shareholders would not vote the same way every single time. However, if one assumes that all shareholders have the same preferences, are equally rationally but have different access to information, and access to information is not stable and randomly distributed among shareholders, then it would follow that shareholders do not vote the same way every time, although they expect to vote the same way.

votes to be exercised in the same way. Therefore, the outcome is the same according to the black box theory or Easterbrook and Fischel's theory.

D. The Homogeneity Assumption

Thus, the homogeneity assumption is the crucial distinguishing factor. In short, if the homogeneity assumption is correct, Easterbrook and Fischel are right, and the ECH's legal problem is potentially an issue. If homogeneity does not apply, then Easterbrook and Fischel are wrong, and the ECH's legal problem is probably not an issue. Without the homogeneity assumption, Easterbrook and Fischel's argument simply does not work. The centrality of the homogeneity assumption was also noted by Martin and Partnoy,¹⁷⁴ as well as by Easterbrook and Fischel's own admission. According to them, "[i]t is well known, however, that when voters hold dissimilar preferences[,] it is not possible to aggregate their preferences into a consistent system of choices."¹⁷⁵ The homogeneity assumption is not only central to Easterbrook and Fischel's theory but also serves as the basis for justification of most theories that justify the one-vote-one-share rule, as was pointed out by Hayden and Bodie.¹⁷⁶

Before addressing the shortcomings of the homogeneity assumption, it is important to emphasise that Easterbrook and Fischel did not adopt this assumption because of a simplistic view that shareholders usually prefer more money than less money. Although this is not an unreasonable assumption, it does not deal with shareholders' risk attitude and time preferences. According to Easterbrook and Fischel, this is not a problem because of diversification.¹⁷⁷

¹⁷⁴ Martin & Partnoy, *supra* note 36.

¹⁷⁵ EASTERBROOK & FISCHEL, *supra* note 20 at 69–70.

¹⁷⁶ Grant M. Hayden & Matthew T. Bodie, *One Share, One Vote and the False Promise of Shareholder Homogeneity*, 30 CARDOZO L. REV. 445, 448 (2008) ("Critical to the success of the one-share-one vote theory, however, is the notion that all shareholders have the same interest—namely, maximizing the residual value of the corporation. Shareholder primacy theory maintains that all shareholders have homogeneity of interest. Indeed, it is seen as a necessary aspect of the theory. If the purpose of the corporation is to maximise the residual, then the shareholders must all agree with this purpose. Otherwise, shareholders may elect directors who will pursue interests apart from residual wealth maximisation. Thus, corporate law theorists have repeatedly emphasized the homogeneity of shareholder interests as a critical assumption of the model.")

¹⁷⁷ See EASTERBROOK & FISCHEL, *supra* note 20, at 29–30 ("We shall nonetheless largely ignore risk aversion with respect to public corporations. . . . Our rationale is simple: diversification. Investors who dislike risk can get rid of risk easily. They may hold low-risk instruments (high grade bonds and Treasury obligations). Investors hold equity if and only if the expected value of these investments beats the return available from other sources. Holding a basket of equities enables the investors to realize these expected returns, free from firm specific risk (whether risk of the firm's business ventures or risk of managers' dishonesty). Those who hold equity instruments may diversify through mutual funds or by selecting some other broad basket. A diversified portfolio will not get rid of risk that goes with the market. It will, however, essentially eliminate the risk that goes with

Diversification allows an investor to invest in all securities, which means that the only thing the investor is interested in is to maximise the overall value of all companies. However, this does not address the issue of divergent risk attitudes among investors. Although investors may desire companies to do well, some investors may be willing to take more risk than others. This issue, though not explicitly discussed by Easterbrook and Fischel, can easily be addressed with the help of Modern Portfolio Theory (MPT).¹⁷⁸ MPT argues that all investors, regardless of risk appetite, should invest in the same risky portfolio¹⁷⁹ and then adjust the riskiness of the portfolio by investing in a risk-free asset or by borrowing at the risk-free rate.¹⁸⁰ Thus, MPT seems to support the assumption that all investors are homogeneous. However, upon further analysis, it seems to be that either MPT does not save the homogeneity assumption, or if it does, it means that the ECH is not a problem. The first problem with MPT is that it is not clear to what extent MPT was ever meant to be a description of reality, as it proved rather difficult to use it for actual investment decisions.¹⁸¹ Others have gone even further and argued that not only does MPT not match reality, MPT fails to model important aspects of investors' behaviour.¹⁸² Others have questioned the merits of MPT because it is based on the normal (i.e. Gaussian) distribution. Nassim Nicholas Taleb argued the following:

After the stock market crash (in 1987), they rewarded two theoreticians, Harry Markowitz and William Sharpe, who built beautifully Platonic models on a Gaussian base, contributing to what is called Modern Portfolio Theory. Simply,

conflicts among firms and scraps over the allocation of gains and losses. A person who holds a diversified portfolio has an investment in the economy as a whole and therefore wants whatever social or private governance rules maximise the value of all firms put together. He is not interested in maximizing one firm's value if it comes out of the hide of another corporation . . . the only reason to care about diversification is that people who are risk averse might want a rule maximizing the lower bound of returns rather than maximizing the expected return, and thus social wealth. If the people who do not like risk can look after themselves at low cost, then there is no remaining reason not to select whatever rule maximises value. And for what it is worth, the vast majority of investments are held by people with diversified portfolios.”)

¹⁷⁸ See Harry Markowitz, *Portfolio Selection*, 7 J. FINANCE 77, 77–91. (1952).

¹⁷⁹ In other words, the optimal risky portfolio (which is the portfolio with the highest Sharpe ratio).

¹⁸⁰ MPT does not explicitly address the problem of diverging time preferences among investors (i.e. investors having different discount rates). However, one can speculate that MPT would allow one to derive a portfolio similar to the optimal risky portfolio but for discount rates, where every investor has the same discount rate.

¹⁸¹ Joshua Brodie et al., *Sparse and Stable Markowitz Portfolios*, 106 PNAS 12267 (2009), <http://www.pnas.org/content/106/30/12267.full.pdf>.

¹⁸² DOUGLAS W. HUBBARD, *THE FAILURE OF RISK MANAGEMENT* 67 (2009) (“In MPT, there is no attempt to explain an underlying structure to price changes. Various outcomes are simply given probabilities. And, unlike the [probabilistic risk assessment], if there is no history of a particular system-level event like a liquidity crisis, there is no way to compute the odds of it.”).

if you remove their Gaussian assumptions and treat prices as scalable, you are left with hot air. The Nobel Committee could have tested the Sharpe and Markowitz models—they work like quack remedies sold on the Internet—but nobody in Stockholm seems to have thought about it.¹⁸³

For the purpose of this article, it is not important to analyse what the merits of MPT are. The important point is that it seems unlikely that corporate law would base one of its central assumptions on highly abstract financial theory, which is not generally accepted to reflect reality.¹⁸⁴ Further, one could argue that if investors would behave according to the postulates of MPT, then empty creditors or shareholders would not be a problem as MPT can be extended to incorporate short sales.¹⁸⁵ Investors would still invest in the optimum risky portfolio and could still be assumed to maximise the value of all companies. If MPT is true, regardless of short selling or the availability of derivatives, investors would all still invest in the same portfolio and adjust the risk by investing in a risk-free asset. Thus, investors would still want that value of all companies in the economy to be maximised, which would mean that empty creditors would not violate a basic assumption of corporate law.

Apart from the implausibility that the homogeneity assumption can be justified on theoretical grounds, Easterbrook and Fischel's own theory becomes inconsistent if one assumes homogeneity. Martin and Partnoy observed that:

[T]he empirical fact that shares with stronger voting rights are more valuable is inconsistent with assumed homogeneity. If shareholders had uniform, expectations, they would (correctly) assume that their colleagues would vote the same way they would, and hence votes would have little or no value. . . . Easterbrook & Fischel [note a] difference of two to four percent in value.¹⁸⁶

Easterbrook and Fischel cannot explain why shares without voting rights usually trade at a discount compared to shares with voting rights. If investors were homogeneous and the purpose of voting rights was to monitor the company, then monitoring would provide a benefit for all shareholders in proportion to their shareholding. Thus, non-voting shares would trade at the same price as voting shares, and the overall price of the shares would be reduced. As stated

¹⁸³ NASSIM NICHOLAS TALEB, *THE BLACK SWAN: THE IMPACT OF THE HIGHLY IMPROBABLE* (2007).

¹⁸⁴ Further, Markowitz published his seminal paper on MPT in 1952 and corporate law predates this date by quite a bit. Thus corporate law must have somehow “known” about MPT before the theory was actually articulated, which is not impossible but somewhat unlikely.

¹⁸⁵ See Eric Zivot, *Introduction to Portfolio Theory*, in *AN INTRODUCTION TO COMPUTATIONAL FINANCE AND FINANCIAL ECONOMETRICS* (forthcoming) (manuscript at 16), <http://faculty.washington.edu/ezivot/econ424/introductionPortfolioTheory.pdf>.

¹⁸⁶ Martin & Partnoy, *supra* note 36, at 13.

above, this is not what happens in reality as non-voting shares are usually traded at a discount. This suggests that voting provides a benefit to shareholders vis-à-vis other shareholders, as well as vis-à-vis other stakeholders in the company, which is impossible according to Easterbrook and Fischel's theory.

Following Easterbrook and Fischel's theory leads to other implausible results too. Easterbrook and Fische write that:

[t]he most basic statutory rule of voting is . . . [a]ll common shares vote, all votes have the same weight, and no other participant in the venture votes, unless there is some express agreement to the contrary. . . . The presumptively equal voting right attached to shares is, however, a logical consequence of the function of voting we have discussed above.¹⁸⁷

If Easterbrook and Fischel's theory is correct, it would be more likely that the one-share-one-vote rule would be a mandatory, rather than the default rule. If the one-share-one-vote rule exists because shareholders have the right incentives, this would be true for all companies, and one would expect that the law would require it (and make it mandatory) for all companies. On the other hand, if voting rights are understood as just another way to attract investments, having one-share-one-vote as the default rule, rather than a mandatory rule, is highly plausible. Many companies struggle to attract investments; therefore, they must provide potential investors with as many incentives as possible (which the one share one vote rule does). There are some instances where these incentives are not needed—the company may be attractive enough without the voting incentive. Therefore, the law allows for flexibility to alter the one share one vote rule.

Furthermore, Easterbrook and Fischel's theory *prima facie* seems to support the rule of one-shareholder-one-vote, rather than one-share-one-vote. If all shareholders have the same interest, they would all vote the same way. This conclusion, however, is avoided by the introduction of monitoring costs:

[I]f the owner of 20 percent of the residual claims acquires all of the votes, his incentives to take steps to improve the firm (or just to make discretionary decisions) is only one-fifth of the value of the decisions. The holder of the votes will invest too little. And he will also have an incentive to consume excessive leisure and prerequisites and to engage in other behaviour that does not maximise profits.¹⁸⁸

¹⁸⁷ EASTERBROOK & FISCHEL, *supra* note 20, at 72.

¹⁸⁸ EASTERBROOK & FISCHEL, *supra* note 20, at 74. Actually, Easterbrook and Fischel seem to suggest that their theory works even without the introducing costs:

Voting flows with the residual interest in the firm, and unless each element of the residual interest carries an equal voting right, there will be a needless

Easterbrook and Fischel seem to suggest that shareholders would invest further resources into monitoring the company until the marginal gain from monitoring is equal to the costs. As large shareholders receive more in dividends from the company, one would expect them to do more of the monitoring. However, the shareholder activism,¹⁸⁹ as well corporate governance literature,¹⁹⁰ suggests that large shareholders are rather bad at monitoring management, whereas small-determined shareholders can be quite good at it. A theory that sees voting rights as just another way to induce investments allows for small investors to be better at monitoring a company than large investors.

Furthermore, theories that base voting rights on the idea of shareholders monitoring management fail to recognize that there are other, possibly better, ways to monitor managers and align their interest with that of the company. Incentive schemes are often used to motivate managers. Arguably, it is only in rare and extreme cases that managers are voted out of office—what motivates them more is a pay-package tied to the company's performance. An argument for voting requirements is that an incentive scheme would not prevent managers from fraudulently appropriating company property. However, this does not explain why shareholders could not simply sue such managers in breach of their fiduciary duty. (It is, of course, true that, under current law, it is difficult for individual shareholders to sue the directors. However, the point of the argument is that to question why shareholders could not be given such a right in order to monitor directors) At the very least, it is not clear why voting rights are necessary for the preventions of breach of fiduciary duties.¹⁹¹ A possible counterargument is that the reasons why incentive schemes for managers exists in the first place is because of shareholder voting rights—without the threat of being voted out of office, directors and managers would pay themselves overgenerously rather than having remuneration based on the performance of the company. However, this argument overlooks investor choice: investors can always simply refuse to invest in the company.

agency cost of management. Those with disproportionate voting power will not receive shares of the residual gains or losses from new endeavors and arrangements commensurate with their control; as a result they will not make optimal decisions.

Id. However, it is quite clear that this is not the case, unless the idea of costs are introduced.

¹⁸⁹ See, for instance, the investment strategies of The Children's Investment Fund Management, Carl Ichan, Third Point Management, and David Webb, to mention just a few.

¹⁹⁰ SIR DAVID WALKER, A REVIEW OF CORPORATE GOVERNANCE IN UK BANKS AND OTHER FINANCIAL INDUSTRY ENTITIES 62, 68 (2009), http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/d/walker_review_261109.pdf.

¹⁹¹ A parallel can be found in the realm of trust law, where beneficiaries of a trust normally do not vote for the trustees. Nevertheless, the law does not see this as an obstacle of imposing fiduciary duties.

The previous arguments do not deny the role of shareholders in monitoring managers or corporate governance. The view that voting rights are an outcome of adversarial bargaining is perfectly compatible with the view that the claimants of the residual income of the company should hold voting rights. In fact, it is quite likely that this would be the case. Claimants to the residual income of a company have the most to gain from voting rights. Therefore, providing this group with voting rights is the most efficient way for the company to allocate voting rights.¹⁹² Easterbrook and Fischel were right to point out that voting rights usually follow the residual income. However, they got it wrong because they regard it as a cornerstone of voting rights. In reality, it is just one facet of a more general theory that shareholders are in conflict with one another the same way they are in conflict with other stakeholders of a company.

Yet, the difference between the ideas proposed in this paper and Easterbrook and Fischel's theory should not be overstated. The starting point of both theories is Adam Smith's insight that the "extended conflict among selfish people produces prices that allocate resources to their best uses."¹⁹³ One difference is that the theory put forward in this article states that there is "extended conflict" among shareholders and the best way for the law to deal with this conflict is to not get involved. Easterbrook and Fischel believe that it can be assumed that there is no conflict between shareholders, which allows them to argue that the law is justified in assuming that shareholders strive for the greater good of all shareholders. Further, the theory put forward in this article and Easterbrook and Fischel's theory agree that the law does allocate rights and obligations to shareholders primarily on the basis of how much they invest in the company, ignoring the individual "costs" incurred by the investors when making the investment. Easterbrook and Fischel achieve this outcome by arguing that all shareholders are the same, therefore their costs are proportionate to their investments. On the other hand, the black box theory argues that the law simply refuses to investigate the individual circumstances of each investor regardless of whether they can be presumed to have similar interests or not. The outcome of both theories will be the same in many, if not most, circumstances. However, the key difference is that Easterbrook and Fischel open the door to the possibility for the law to take into account that shareholders have different interests, if it can be shown that as a matter of fact they do not have the same interest and that it is expeditiously for the law to take the divergent interests into account. One such instance could be in the case of CDSs. For Easterbrook and Fischel, the equality

¹⁹² Providing a shareholder with voting rights will induce that shareholder to contribute more capital to the firm than an equivalent creditor, as voting rights for shareholders will improve the earning potential of a company more than voting rights for creditor. This is known as *ceteris paribus*.

¹⁹³ EASTERBROOK & FISCHEL, *supra* note 20.

of interests among shareholders is essentially presumption of fact by the law. This article, on the other hand, argues that it is a fundamental tenant of corporate law not to take into account anything beyond the investment itself. The law can, of course, change and start to take into account things like derivatives positions of investors. However, people who argue for this change need to acknowledge that this would constitute a significant departure from the standard model of corporate law.

The one caveat in the above discussion is that shareholders are usually prohibited by law from selling their voting rights without selling their shares. This seems to favour Easterbrook and Fischel's theory because the black box theory does not provide a good reason for why vote selling should be illegal. Although this argument has some force, it is not as strong as it appears. The landmark Delaware case of *Schreiber v. Carney*¹⁹⁴ casts some doubt on how strongly the prohibition of vote selling is actually enshrined in the law. The court held that:

[g]iven the holdings in *Ringling* and *Oceanic*[,] it is clear that Delaware has discarded the presumptions against voting agreements. Thus, under our present law, an agreement involving the transfer of stock voting rights without the transfer of ownership is not necessarily illegal and each arrangement must be examined in light of its object or purpose. To hold otherwise would be to exalt form over substance. As indicated in *Oceanic* more than the mere form of an agreement relating to voting must be considered and voting agreements in whatever form, therefore, should not be considered to be illegal per se unless the object or purpose is to defraud or in some way disenfranchise the other stockholders. This is not to say, however, that vote-buying accomplished for some laudible purpose is automatically free from challenge. Because vote-buying is so easily susceptible of abuse it must be viewed as a voidable transaction subject to a test for intrinsic fairness.¹⁹⁵

In their analysis of *Schreiber*, Hayden and Bodie conclude:

[The Delaware Chancery Court] recognized two principles behind the general prohibition against vote buying: (1) protecting shareholders against fraud and deceit, and (2) requiring shareholders to exercise their own independent judgment. . . . As for the independent judgment principle, its traditional justification was that "by requiring each stockholder to exercise his individual judgment as to all matters presented, [t]he security of the small stockholders is found in the natural disposition of each stockholder to promote the best interests of all, in order to promote his individual interests." However, the court found that this rationale was "obsolete because it is both impracticable and impossible of application to modern corporations with many widely scattered stockholders."

¹⁹⁴ *Schreiber v. Carney*, 447 A.2d 17, 26 (Del. Ch. 1982).

¹⁹⁵ *Id.*

Instead, the court held the loan transaction to a standard of entire fairness.¹⁹⁶

It appears that vote selling is a prohibition against unfairness, rather than an absolute prohibition. The black box theory can explain such a prohibition. As mentioned above, investments need to be attracted from large investors, as well as from small investors; minority voting rights exist to provide for this. Therefore, rules such as the prohibition of fraud on the minority in the United Kingdom, fiduciary type obligations on major shareholders, or fairness standard make sense. In a time when derivatives were less common than they are now, it could be the case that vote selling was primarily a tool for fraud. Arguably, this is no longer case. However, a word of caution is in order. Some commentators viewed *Schreiber* rather negatively,¹⁹⁷ and it may be premature to argue that the prohibition on vote selling is dead. However, *Schreiber* does indicate that the vote selling prohibition is not as firmly entrenched in the law as one might think.

E. Normative Arguments Against the Homogeneity Assumption

Even if it is granted that the black box theory is correct, the question remains as to why the law chose to adopt this framework. In other words, why did the law's evolution not involve an analysis of an investor's wider circumstances? To give a very brief answer, this article will now depart from its purely factual analysis to give some normative reasons. First, as previously argued, treating investors like a black box is important to achieve fungibility and tradability of financial instruments.¹⁹⁸ Another, and perhaps more important, reason is that by not inquiring into the motives of investors, the law enables companies to become more like a facilitating device.¹⁹⁹ Companies are legal devices that can be used for many endeavours. If the law would tell shareholders what to do with a company (i.e. requiring that shareholders must vote to maximise the value of the company), this multiplicity would be lost.

¹⁹⁶ Hayden & Bodie, *supra* note 176, at 483.

¹⁹⁷ See Thompson & Edelman, *supra* note 21, at 164–65.

¹⁹⁸ However, it is important to point out that a number of other theories, including Easterbrook and Fischel's theory, also achieve fungibility.

¹⁹⁹ One can draw an analogy to the law of trusts. James Penner in writing about trusts says that:

The law of trusts is a pre-eminent example of the law's facilitative function: the law of trusts has provided different facilities to its users over the course of legal history, to allow individuals to leave property otherwise than by the law of primogeniture, to avoid irksome feudal incidents, to avoid taxes, to set up business ventures, and much else, but the principal core function is to arrange for the structuring of beneficial interests in property in creative ways not permitted at common law.

James Penner, *An Untheory of the Law of Trusts, or Some Notes Towards Understanding the Structure of Trusts Law Doctrine*, 63 CURRENT LEGAL PROBS. 653, 665 (2002).

Easterbrook and Fischel initially seem to agree that the law should leave investors alone to decide what to do with the company.²⁰⁰ However, the homogeneity assumption allows them to advocate a system where investors are *de-facto* forced to maximise wealth, according to a very limiting notion of what constitutes wealth. Yet, for a theory that purports to follow Adam Smith, this puts the cart before the horse. According to Adam Smith, when economic actors behave in a self-interested manner then they maximise the overall welfare as a side product. Easterbrook and Fischel's theory, by contrast, allows the law to 'force' investors to behave in a certain way, with the justification that this will result in wealth maximisation. Some commentators seem confused and treat value maximisation by a company as equivalent to shareholders following their own preferences. For instance, Schouten attempts to combine the insights from Friedrich Hayek—that the market is a system for information aggregation²⁰¹—with Condorcet's Jury Theorem,²⁰² applying it to voting by shareholders and arguing as follows:

Moving to legal constraints, we have already seen that courts are suspicious of conventional vote buying because it is susceptible of abuse. This suspicion is also warranted with respect to the new vote buying [i.e. decoupling of legal and economic rights]. In the extreme case where a shareholder uses derivatives to build a net short position, his interests clearly conflict with those of other shareholders, as he will prefer an outcome (share price decrease) that is the opposite from that preferred by other shareholders (share price increase). The conflicted shareholder will, to use our terminology, vote insincerely.²⁰³

However, Schouten's argument is oblivious to the fact that Hayek's notion of the market as a giant information aggregation machine only works if the price signal is based on the preferences of individuals. As soon as people are required to make choices to maximise the greater good, and not based on what they want, prices lose the ability to convey information. Again, this is not to say that Hayek was right or wrong. This is only to show that requiring a company's investors

²⁰⁰ See, e.g., EASTERBROOK & FISCHEL, *supra* note 20, at 35–36 (“An approach that emphasizes the contractual nature of a corporation removes from the field of interesting questions one that has plagued many writers: what is the goal of the corporation? Is it profit (and for whom)? Social welfare more broadly defined? Is there anything wrong with corporate charity? Should corporations try to maximise profit over the long run or the short run? Our response to such questions is: ‘Who Cares?’”).

²⁰¹ F. A. Hayek, *The Use of Knowledge in Society*, 35 AMERICAN ECON. REV. 519 (1945), <https://www.aeaweb.org/aer/top20/35.4.519-530.pdf>.

²⁰² See, e.g., Krishna K. Ladha, *The Condorcet Jury Theorem, Free Speech, and Correlated Votes*, 36 AM. J. POL. SCI. 617, 617–34 (1992).

²⁰³ Michael C. Schouten, *The Mechanisms of Voting Efficiency* 48–49 (Ctr. for Bus. Research, Univ. of Cambridge, Working Paper No. 411, 2010), <https://www.sec.gov/comments/s7-14-10/s71410-198a.pdf>.

to vote in such a way that maximises the value of the company departs significantly from the idea that investors should be allowed to vote according to their own interests.

Easterbrook and Fischel justify the one-share-one-vote rule by claiming it is efficient because it results in shareholders monitoring a company until the marginal costs are equal to marginal benefit. However, in order to get shareholder voting within a neat *marginal cost = marginal benefit* framework, they have to make some very heroic assumptions. In the black box theory, efficiency is not achieved by equating marginal costs to marginal benefit, but by the assumption that under normal circumstances economic actors if left to their own devices will produce the socially optimal outcome.

F. Does Corporate Law Assume That Investors Vote to Maximise the Value of a Company?

Another prominent argument by proponents of the ECH is that corporate and insolvency law assumes that investors vote to maximise the value of the company. Decoupling of economic and legal interests is therefore bad because it makes this assumption invalid. The argument against this notion is similar to that against basing voting rights on net economic exposure—namely that the law never made this assumption because the idea of “maximising the value of the company” is poorly defined. One might argue that maximizing the value of a company simply means maximizing the present value of the future income stream of the company. For example, if project *A* has a discounted future cash flow of *Y* and project *B* has a discounted cash flow of *Z* and $Y > Z$, then the shareholders or creditors would have a duty to vote for this project. However, this again fails to take into account the fact that shareholders and creditors will assess their holdings within the context of their portfolios.

Hayden and Bodie made a similar point in a more extreme form,²⁰⁴ arguing

²⁰⁴ They write that:

The notion of maximisation of portfolio value strikes at the heart of the shareholder primacy norm. Under this theory, social wealth will not be maximised if each firm seeks to maximise returns for its own shareholders. Instead, social wealth depends not on the actions of individual companies, but on the actions of all companies in the economy. What this means is that in some instances, it would be more efficient (on a societal level) for a company to do something that decreased its own shareholders' wealth. Yet directors would be violating their fiduciary duties if they went forward with the transaction, since it would harm the company's shareholders. This example demonstrates yet another axis on which shareholders split into different groups based on different interests.

Hayden & Bodie, *supra* note 176, at 494.

that the director's duty to maximise the value of a company needs to be reconsidered. They are correct in their premise that investors do not necessarily prefer to maximise a company's future income stream;²⁰⁵ however, this does not necessarily commit one to the view that a rule requiring directors to maximise the value of the company ignoring shareholders should be rejected (herein, referred to as the "simple wealth maximizing rule"). First, directors of a company do not have complete (or indeed much) information on each investor. Therefore, it would be extremely difficult for directors to assess the optimal risk-return pay-offs. Second, shareholders can select their optimal investment mix through diversification, which is probably better done at the investment-level rather than the company-level. Third, directors would still need a way to aggregate competing preferences. If they simply follow the majority shareholders' preference then minority investors might be put off. Although there may be a superior rule than the simple wealth maximizing rule for a specific transaction, a case-specific determination is quite difficult and may open the door for the exploitation of one group of investors by another. As such, the simple wealth maximizing rule may be a good compromise. (However, the case may be different from small, closely-held private companies may be an exception.)

Hu and Black acknowledge that the law does not generally require voting based on wealth maximisation. "Shareholders can vote based on their private interests, even if those diverge from corporate interests . . . The freedom to vote to favour one's private interests is largely taken for granted, rather than seen as needing justification."²⁰⁶ Thus, it may be tempting to conclude that neither shareholders nor creditors have a general duty to vote in the best interest of the company, and can vote any way they please (provided, of course, there is no other breach of duty or fraud on the minority). However, judicial authority seem to suggest otherwise. The Delaware Supreme Court in *Kurz v. Holbrook* held that "[w]hat legitimizes the stockholder vote as a decision-making mechanism is the premise that stockholders with economic ownership are expressing their collective view as to whether a particular course of action serves the corporate goal of stockholder wealth maximisation."²⁰⁷

This appears to conflict directly with the idea that shareholders generally do not have a duty to vote to maximise the value of the company, however, the Delaware Supreme Court did not see a conflict:

²⁰⁵ On a very basic level, investors will differ in their risk appetite, and a statement like maximizing future income streams is meaningless if one does not either assume a world without risk or specify the risk appetite of the investor.

²⁰⁶ Hu & Black, *Importance and Extensions*, *supra* note 7, at 701.

²⁰⁷ *Kurz v. Holbrook*, 989 A.2d 140, 178 (Del. Ch., 2010).

These principles also do not conflict with the venerable maxim that stockholders can choose freely whether and how to vote, and may do so for any reason including “for personal profit, or determined by whims or caprice”. *Ringling Bros.-Barnum & Bailey Combined Shows v. Ringling*, 53 A.2d 441, 447 (Del.1947). The premise underlying that freedom is the alignment of economic interests and voting rights. The Ringling court ruled at a time when economic interests and voting rights were inextricably linked.²⁰⁸

However, there are possible objections to the reasoning in *Kurz*:

1. The expression “for personal profit, or determined by whims or caprice”²⁰⁹ seems to imply that shareholders are genuinely free to vote any way they please, rather than there being an obligation to maximise the value of the company.
2. The judgement fails to define what wealth maximisation means. The judgement seems to equate wealth maximisation to maximising the share value. However, this does not provide guidance on how a shareholder should decide between a high-risk, high pay-out strategy and a low-risk, low pay-out strategy, or between a high share price now and a low share price in the future or *vice versa*. It could be argued here that wealth maximisation, rather than a unique course of action requirement, defines a set of actions or voting options for a shareholder.
3. The judgement acknowledges that agreements to vote are permissible. However, the difference between a voting trust and the decoupling of legal and economic rights seems to be more a matter of degree rather than principle. If a shareholder enters into a voting agreement he transfers some or all of his legal rights to another, but not the economic rights (i.e. legal and economic rights are being separated), it is not clear why this form of decoupling is acceptable but decoupling through CDSs is not.

Nevertheless, *Kurz*, without a doubt supports Hu and Black’s argument. There are also other cases (for instance Hu discusses the Canadian TELUS case),²¹⁰ which make explicit or implicit reference to the decoupling framework.

²⁰⁸ *Id.*

²⁰⁹ *Id.*

²¹⁰ Henry T. C. Hu, *Financial Innovation and Governance Mechanisms: The Evolution of Decoupling and Transparency*, 70 BUS. LAW. 347, 375–81 (2015).

However, there is also judicial support for the arguments put forward by this article.²¹¹ Nevertheless, it seems to be the case that the ECH has found some resonance within the judiciary and thus, the law may develop in such a way as to incorporate the ECH. The point to note is that the law in this area currently seems to be at a pivotal moment. This article only states that the law does not have to develop to incorporate the ECH (and that it would be better if it would not). However, this article does not make a prediction about how the law will actually develop.

VI. EXAMPLES OF EMPTY CREDITORS AND REGULATORY DEVELOPMENTS

Some readers may not take easily to the idea that empty creditors are not a significant problem. This may be the case not so much because they disagree with the arguments above, but because they feel there are too many real life examples where empty creditors have been an issue—there is simply too much smoke for there to be no fire. The problem with this argument is that many of the examples given to support the ECH have very little to do with empty creditors. There may be a small number of cases where decoupling of economic and legal interest cause a problem. However, far from being a large-scale problem that requires large-scale action, the isolated problem of empty creditors requires incremental action, if any.

Hu and Black attribute many of the current economic ills to the decoupling of economic and legal interests. Yet, most of the examples they give are not related to the decoupling of economic and legal interest. For instance, they argue that decoupling contributed to the housing crisis of 2008 by making negotiations between homeowners and lending institutions more difficult, particularly because homeowners could no longer negotiate directly with the lenders, as original lenders no longer held their interest.²¹² In many instances, they argue, the borrowers did not even know who ended up holding their debt (and in many

²¹¹ See *infra* Part VI and note 176.

²¹² Hu & Black, *Importance and Extensions*, *supra* note 7, at 729–30 (“The current housing finance crisis highlights some of the issues arising from debt decoupling. In the past, homeowners facing financial difficulty could try to negotiate directly with lenders for waivers and loan modifications. This is harder today. Many home mortgage loans are resold by the initial lender, securitized, or both. If a loan has been securitized, the effective holder of the lender’s contractual rights—the servicing agent for the loan that deals with the homeowner—may have limited authority to make accommodations—or too little economic ownership to want to do so. The economic interest will often be spread among a wide range of investors, potentially around the world. Even if these investors had congruent interests and often they do not because of the way the underlying obligations were divided into tranches—the transaction costs simply to find them would be prohibitive. Sometimes it can be unclear who holds the right to foreclose.”).

instances multiple parties held the debt).²¹³ However, apart from the question whether this description is accurate, it is not an example of decoupling of legal and economic interest causing a problem; if anything, it is an example of problems caused by dispersed holdings of debt securities. This is a common problem, one that issuers of publicly-traded debt are very familiar with, however, it has nothing to do with decoupling. Even without decoupling, it is possible to divide a loan into multiple slices and sell each slice with full legal and economic rights, creating dispersed ownership and making negotiations difficult.²¹⁴ Arguably, if the originators of the loans had retained legal interest and only transferred economic interest, it would have been easier for borrowers to renegotiate; as the originators would have had legal power to change the loans' terms.

Further, Hu and Black argue that decoupling is a source of systemic risk for the financial system.²¹⁵ They quote Duffie by stating: "Duffie (2007) offers the judgment that '[e]ven specialists in [CDOs] are currently ill equipped to measure the risks and fair valuation of tranches that are sensitive to default correlation' and discusses how this might contribute to liquidity shocks."²¹⁶

Duffie might well be correct in his claim regarding collateralized debt obligations (CDOs). However, Hu and Black fail to explain what sensitivity to default correlation has to do with decoupling. Debt can be securitized without decoupling. It may be that CDOs were at the heart of the financial crisis; however, apart from synthetic CDOs, securitisation does not depend on decoupling of economic and legal interest.

A. *Stock Lending*

Apart from the general examples discussed above, Hu and Black posit a number of more concrete examples. An individual dissection of each example would be too time-consuming for the purposes of this article; however, many examples mentioned are based on stock lending. Therefore, it is worthwhile to

²¹³ *Id.*

²¹⁴ In fact, negotiations might be easier if the legal ownership is retained by one person and only the economic ownership is sold. That way the owner may have to negotiate only with the holder of the legal interest.

²¹⁵ Hu & Black, *Governance and Systemic Risk*, *supra* note 7, at 691 ("Decoupling can foster other potential sources of systemic risk. Some reflect the ways in which financial innovations in general can contribute to systemic risk (Hu, 1993). These include: modelling errors (including underweighting low probability, large loss ('tail') risks, such as the loss of liquidity in times of market stress); buyer and seller failures to understand complex financial products; and new types of agency costs, both within financial institutions and between these institutions and their customers.").

²¹⁶ *Id.* at 691.

spend some time on Hu and Black's analysis of stock lending or share borrowing:

An alternate empty voting strategy is known as record date capture. This strategy involves borrowing shares in the stock loan market just before the record date and returning the shares immediately afterwards. Under standard borrowing arrangements, the borrower has no economic exposure to the company. . . The borrower contracts with the share lender to (1) return the shares to the lender at any time at the election of either side, and (2) pay the lender an amount equal to any dividends or other distributions the borrower receives on the shares. Taxes aside, this loan agreement (a 'coupled asset' in our framework) leaves the borrower holding votes without economic ownership, while the lender has economic ownership without votes. . . . A subtle yet central aspect of these empty voting strategies is that they do not directly require market trading of shares. Thus, they can often be carried out, rapidly and on a large scale, with little impact on share price. Consider the share borrowing strategy. The empty voter borrows shares, and votes simply move from the share lender to the empty voter. No shares are bought or sold.²¹⁷

First, a small clarification, Hu and Black wrongly characterize how stock lending works by claiming that legally it does not involve a sale of shares. In fact, from a legal point of view, securities lending does entail the buying and selling of securities:

Securities lending describes the common market practice by which securities are transferred temporarily from one party (the lender) to another (the borrower) with the borrower obliged to return them (or equivalent securities) either on demand or at the end of any agreed term. However, the word 'lending' is in some ways misleading. Under English [and Australian] law, the transaction is in fact an absolute transfer of title (as in a sale) against an undertaking to return equivalent securities.²¹⁸

More importantly, the issues that Hu and Black try to highlight have nothing to do with decoupling but only how one should legally define the relationship between lender and borrower in a stock lending transaction. The relevant legal issue here is not the decoupling of legal and economic interest. Instead, the relevant question is at what point does a party not permitted to vote as a shareholder have so much control over the party that is permitted to vote such that the former ought to be regarded as having acquired voting rights from the latter. Hu and Black address this under the heading of soft parking, arguing:

Firms themselves can use decoupling techniques to provide insiders or other

²¹⁷ *Id.* at 641.

²¹⁸ JOHN C. KING, AUSTRALIAN SECURITIES LENDING ASS'N, AN INTRODUCTION TO SECURITIES LENDING (AUSTRALIA) 8 (2005), <http://asla.com.au/info/LongSecLendingPaper.pdf>.

friendly third parties with votes on the firm's own shares, yet little or no economic exposure. In doing so, firms are effectively voting their own shares. This vote parking is often 'soft' and based on informal expectations about how the shares will be voted. Company insiders arrange for voting ownership to be held by someone else, and ensure that the someone [sic.] else has incentives to vote pro-management. Usually, the voteholder is not formally obliged to vote as management directs—that would invite disallowance of the votes under corporate law. Incentives and informal understandings do the work instead. . . . One strategy involves the corporation acquiring economic ownership of its shares through an equity swap or other equity derivative, contract, say with a derivatives dealer or other professional friend. In substance, the corporation has repurchased its own shares.²¹⁹

It is clearly a problem when a company votes its own shares, as this is illegal in many jurisdictions. However, the relevant issue here is not the decoupling of economic and legal ownership, but that the company is able to influence another party to vote according to its wishes. Hu and Black admit that the company only ensures “that someone [sic] else has incentives to vote pro-management.”²²⁰ These incentives are the key issue, not decoupling. If the company were party to a soft park arrangement, but had no way of influencing the legal interest holders, then the company could not influence the vote. A company, who is party to a soft parking arrangement (or rather the directors or managers of such company), is usually not interested in economic ownership of the shares as such (i.e. the company does not seek to profit from their derivatives position). What management wants are the legal rights associated with the shares, precisely those rights that a soft parking arrangement does not provide. Influence is key in this transaction; however, decoupling itself does not provide that influence. Hu and Black agreed with this when they write that the “dealer [i.e. the person who holds the voting rights] wants to stay on good terms with this client and preserve a reputation for treating clients well.”²²¹ That is the reason why a dealer would vote their shares rights according to the wishes of the company. Regardless of whether this is true or not, the key point for Hu and Black is that the dealer wants to stay on good terms with the company. The primary effect of decoupling in a soft parking arrangement, as described by Hu and Black,²²² is to (slightly) lower the costs to the person holding the shares by isolating that person from economic exposure to the shares. This means that the incentives necessary to induce that person to vote pro-management are lower. In that sense, decoupling does contribute to the problem. The legally relevant

²¹⁹ Hu & Black, *Importance and Extensions*, *supra* note 7, at 643.

²²⁰ *Id.*

²²¹ *Id.* at 645.

²²² However, there might be whole range of other reasons why parties may engage in soft parking.

issue, however, is conflict of interest. For instance, if a company gives a lot of work to an investment bank (and pays many fees) and the investment bank also happens to own shares in that company, in a hostile take-over situation the bank might well have an incentive to vote for the incumbent management, regardless of whether the bank owns the economic and the legal rights. The relevant legal issue is to determine whether a shareholder is an interested party or not, an issue the law routinely deals with. This issue was discussed in *CSX Corporation v. The Children's Investment Fund Management (UK) LLP*.²²³ Although the case was decided on other grounds, in an *obiter dicta* statement, Circuit Judge Ralph K. Winter held as follows:

In my view, without an agreement between the long and short parties permitting the long party ultimately to acquire the hedge stock or to control the short party's voting of it, such swaps are not a means of indirectly facilitating a control transaction. . . . In my view, cash-settled total-return equity swaps do not, without more, render the long party a "beneficial owner" of such shares with a potential disclosure obligation under Section 13(d) . . . The issue here is not fact specific. Total-return cash-settled swap agreements can be expected to cause some party to purchase the referenced shares as a hedge. No one questions that any understanding between long and short parties regarding the purchase, sale, retention, or voting of shares renders them a group—including the long party—deemed to be the beneficial owner of the referenced shares purchased as a hedge and any other shares held by the group. Whether, absent any such understanding, total-return cash-settled swaps render a long party the beneficial owner of referenced shares bought as a hedge by the immediate short . . . party or some other party down the line is a question of law not fact.²²⁴

This analysis is correct. Absent an agreement or understanding, being party to decoupling of legal and economic rights does not in itself mean that one party has an incentive to act in the interest of the other party. It might be argued, however, that this is only true on a theoretical level—that in practice dealers usually vote to please their clients. This is an empirical question, which can only be settled by further research. Yet, evidence presented by the FSA (now FCA) and PwC in the UK suggests otherwise.²²⁵ This is not to say that disclosure of economic interests, is never desirable. In bankruptcy proceedings, creditors are often grouped together if they share certain characteristics. In this instance, it makes sense to base the group on economic ownership because creditors in the same group are likely to have similar interests. However, it is worth

²²³ See generally *CSX Corp. v. Children's Inv. Fund Mgmt. (UK) LLP*, 654 F.3d 276 (2d Cir. 2011).

²²⁴ *Id.*

²²⁵ FIN. SERVS. AUTH., DISCLOSURE OF CONTRACTS FOR DIFFERENCE 6 (2007), http://www.betterregulation.com/external/cp07_20.pdf.

remembering that the grouping of creditors is essentially a time saving device. Likewise, if creditors serve on creditor committees it is useful to know about their economic interests. This is because these creditors are intended to represent other creditors. As is usual in agency situations, conflicts of interests need to be addressed. However, the general point remains that empty creditors do not pose a special problem and in cases where there should be disclosure, the law already demands such disclosure.

B. *The Blackstone Codere CDS*

The case of the Blackstone Group, a private equity firm, and Codere, a Spanish gaming company, is not discussed by Hu and Black. Yet, it is arguably one of the most well-known cases in relation to the ECH, particularly because it was parodied by the prominent US comedian Jon Stewart.²²⁶ Although the case did not generate much academic interest, its prominence in the main-stream media merits a brief discussion.

According to the Bloomberg Business,²²⁷ GSO Capital Partners LP (“GSO”), a unit of the Blackstone Group, bought bonds issued by Codere worth €25–€30 million and CDSs written on these bonds. Later, GSO acquired a €100m revolving loan facility to which Codere was a party. Thereafter, GSO agreed to roll over the loan facility under the condition that Codere would pay the coupon on its bonds late thereby triggering the CDS. Codere agreed and paid the coupon two days after the 30-day grace period stipulated by ISDA, which resulted “in a \$197 million payment to holders of the swaps. Based on a value of 54.5 cents on the dollar for the bonds set at an Oct. 9 auction . . . to determine the swaps payout, GSO would have made from 11.4 million euros to as much as 13.7 million.”²²⁸ For some, this transaction was nothing short of legalised fraud,²²⁹ and it seemed a clear case of empty creditors.²³⁰ Actual data on the transaction is hard to come by; therefore, analysis must be done on an abstract level. According to Blackstone, it actually helped Codere. In response to the satire by Jon Stewart, Blackstone responded:

²²⁶ See Letter from Warren E. Buffet, *supra* note 2; *The Daily Show with Jon Stewart: December 4, 2013—Blackstone & Codere*, *supra* note 5.

²²⁷ Stephanie Ruhle, Mary Childs & Julie Miecamp, *Blackstone Unit Wins in No-Lose Codere Trade: Corporate Finance*, BLOOMBERG BUS. (Oct. 22, 2013, 8:02 AM), <http://www.bloomberg.com/news/articles/2013-10-22/blackstone-unit-wins-in-no-lose-codere-trade-corporate-finance>.

²²⁸ *Id.*

²²⁹ See, e.g., Dan Steinhart, *How to Make \$15.6 Million, Risk-Free*, CASEY RES. (Oct. 25, 2013), <http://www.caseyresearch.com/cdd/how-to-make-15.6-million-risk-free>.

²³⁰ As far as the authors, however, no commentators actually apply the label “empty creditors” to this case.

We love Jon Stewart and he continues to be one of the funniest people on TV. But the somewhat boring truth is that we cooperated with Codere and its advisors to save it from bankruptcy or liquidation. We provided capital when no one else would, which allowed the Company to live and fight another day.²³¹

It is difficult to ascertain if it is true that no one else would have provided capital to Codere. However, the fact remains that Blackstone did roll-over the loan—it provided a substantial amount of capital to a company in deep financial distress. Further, the profit figure of €1.4–€13.7 million is the gross profit, not the net profit, as it was pointed out by the financial journalist Felix Salmon.²³² Blackstone, in all likelihood, did not get the CDS for free, but had to pay for it. In fact, it seems likely that Blackstone must have paid quite a lot for the CDS due to Codere’s difficult financial situation. This would have reduced Blackstone profit on the CDS leg of the transaction quite substantially. Even assuming the trade was profitable for Blackstone, it certainly was not risk-free. The transaction could only be implemented by Blackstone “tak[ing] a huge direct exposure to Codere on the other side of its trade”²³³ (i.e. rolling over the loan). Furthermore, the interesting aspect of the transaction was, as it was pointed out by Matt Levine, that Blackstone found a way to turn the market view of Codere’s default risk into cash.²³⁴ As he explains:

“The credit-default swaps market is a way to express in terms of money the market’s estimate of a company’s chance of default—real default, not missing a payment by two days—in the future. Blackstone found a way to turn that expression in terms of money into money. One day it had a CDS contract with a mark-to-market value of 11 million euros or whatever; the next day it had 11 million euros. One day the banks were taking risk on Codere’s credit that had gone against them to the tune of 11 million euros; the next day they had no risk and 11 million fewer euros. The risk that they got rid of was still worth about 11 million euros.”²³⁵

All this makes it more likely that the true motivation behind the transaction was not to destroy Codere, in order to profit from the CDS but to restructure the debt. The reason Codere needed to be put into bankruptcy was to deal with hold-

²³¹ Maureen Farell, *Recent Blackstone Deal in Focus on The Daily Show*, WALL ST. J.: MONEYBEAT (Dec. 5, 2013, 10:24 AM), <http://blogs.wsj.com/moneybeat/2013/12/05/recent-blackstone-deal-in-focus-on-the-daily-show/>.

²³² Felix Salmon, *The Truth About Blackstone and Codere*, REUTERS (Dec. 6, 2013), <http://blogs.reuters.com/felix-salmon/2013/12/06/the-truth-about-blackstone-and-codere/>.

²³³ *Id.*

²³⁴ Matt Levine, *Blackstone Made Money on Credit-Default Swaps with This One Weird Trick*, BLOOMBERG VIEW (Dec. 5, 2013, 5:47 PM), <http://www.bloombergview.com/articles/2013-12-05/blackstone-made-money-on-credit-default-swaps-with-this-one-weird-trick>.

²³⁵ *Id.*

out creditors.²³⁶ Felix Salmon argued that rather than being to the detriment of Codere, Blackstone gave the company a second chance, stating that “[f]or a piece of clever financial engineering, that’s an uncommonly positive societal outcome.”²³⁷ Another aspect of the transaction is that depending which law applies to the contract, the creditors who were paid late may have a claim against Blackstone under the doctrine of tortious interference.²³⁸ After all, Blackstone induced Codere to breach its contract with a third party and Blackstone had actual knowledge of the contract.

C. Regulatory Developments

Notwithstanding the above discussion, superficially it may appear that regulatory developments seem to suggest that regulators, at least, take the ECH seriously. For instance, since June 2009, the United Kingdom’s Disclosure Rules and Transparency Rules sourcebook (DTR) requires the disclosure of financial instruments that have a similar economic effect to that of qualifying financial instruments.²³⁹ Essentially, DTR 5.3.1(b) aims to catch contracts for differences (CfDs) and other derivatives instruments that provide the same economic exposure as shares. However, in the relevant consultation the FSA wrote:

[T]he key question is whether CfDs are in effect a substitute for shares so that disclosure of CfD positions would bring the same benefits to price formation, takeover situations and market confidence as MSN disclosures. This would be the case where:

- CfD positions are closed out with the underlying stock;
- and/or CfD writers vote on behalf of CfD holders where they hedge their positions with the underlying stock

The survey carried out for us by PwC suggests that the policies and practices of investment banks writing CfDs do not generally operate in these ways. But it also demonstrates that despite the stated—and implemented—policies of investment banks, holders of CfDs do sometimes approach the writers seeking

²³⁶ See, e.g., Dan Primack, *Blackstone Responds to Jon Stewart*, FORTUNE (Dec. 5, 2013, 7:19 PM), <http://fortune.com/2013/12/05/blackstone-responds-to-jon-stewart/>.

²³⁷ See Felix, *supra* note 235 (“Add it all up, and I really don’t think that what Blackstone did was particularly egregious; there’s certainly no reason to believe that it should be illegal. . . . Blackstone’s actions were a large part of the reason why Codere managed to survive. Far from being a pile of ashes, Codere now has a real chance of avoiding liquidation. For a piece of clever financial engineering, that’s an uncommonly positive societal outcome.”).

²³⁸ See, e.g., *Lumley v. Gye*, [1853] EWHC QB J73 i (UK).

²³⁹ Pursuant to DTR 5.3.1(b).

to exert influence on an undisclosed basis over voting rights attached to stock held as hedge against those contracts (it should be noted that the general policy of investment banks is not to vote shares in accordance with CfD holders' wishes).²⁴⁰

There are two things to note about this statement. First, according to the survey, CfDs are not generally used to exercise influence. Second, the FSA (now FCA) chose to ignore this finding of the survey in favour of anecdotal evidence.²⁴¹ However, disclosure of CfDs is not necessarily contrary to the arguments in this article because disclosing a CfDs' position means the market is provided with more information, which should contribute to better price discovery.

Further, disclosure obligations in post-financial crisis regulations, as provided in Dodd-Frank Title VII in the United States or the EMIR or MiFID II in Europe, are aimed to improve transparency not to address the empty creditor problem but to address counterparty risk.²⁴² Likewise, the EU Regulation on Short Selling and Certain Aspects of Credit Default Swaps (EU) No 236/2012 is not a piece of legislation to address empty creditors.²⁴³ The regulation seems to be less concerned with empty creditors and more with market stability. For instance, this can be seen from the dual regimes of disclosure (i.e. net short position of > 0.2% in eligible shares need to be disclosed 'privately' to the competent authorities) and the prohibition on naked short-selling. Such a prohibition makes most sense if one is concerned with the market impact when the position is closed out, rather than with empty creditors. Further, the Short Selling Regulation contains an exemption for market makers. If the issues raised by Hu and Black were part of the motivation behind the Short Selling Regulation, one would not expect such an exemption to exist. (As discussed above, Hu and Black are concerned with how dealers that are parties to short positions behave in the market, and the same reasoning applies to market makers as well). Thus, in conclusion, it can be stated that, besides the first glance appearance, there is no broad regulatory trend to regard empty creditors or empty shareholders as a significant problem.

²⁴⁰ See FIN. SERVS. AUTH., *supra* note 225, at 6.

²⁴¹ Among other things, this raises the question why the FSA hired PwC to conduct the survey in the first place.

²⁴² See generally Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376; 2012 O.J. (L 201) 1; 2014 O.J. (L173) 84.

²⁴³ See 2012 O.J. (L 201) 1 ¶4, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:201:0001:0059:EN:PDF>.

VII. CONCLUSION

This article tried to show three things. First, this article showed that the ECH consists of two distinct issues: the economic and the legal problem. Second, this article demonstrated that the economic problem is unlikely to be a significant issue because CDS sellers have an incentive to buy the underlying debt. However, further research is necessary to get a more comprehensive understanding. The introduction of reporting requirements for most derivatives is likely to be of great help for this research. Third, this article argued that the legal problem is based on a misunderstanding of what the underlying assumptions of corporate law are. According to this article, all rights that investors have in a company are solely based on the amount they invested. It is therefore irrelevant whether an investor has a CDS position or not, and, as such, CDSs do not violate the background assumptions of corporate or insolvency law. This does not mean that one can be certain that no law or regulation, anywhere, is affected by empty creditors. It means only that empty creditors are not contrary to the background assumption of corporate law. All of this suggests that the best policy response to empty creditors is to do nothing. If any policy action is needed it is probably enough to rely on the disclosure requirements for derivatives.

