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Limits of Disclosure

Steven M. Davidoff* & Claire A. Hill**

IKB [Deutsche Industriebank AG] had an army of Phd types to look at CDO deals and analyze them, he said. But Wall Street knew that they didn't get it. When you saw them turn up at conferences there was always a pack of bankers following them.

I. INTRODUCTION

One big focus of attention, criticism, and proposals for reform in the aftermath of the 2008 financial crisis has been securities disclosure. Many commentators have emphasized the complexity of the securities being sold, arguing that no one could understand the disclosure.² Some

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^{1.} WILLIAM COHAN, MONEY AND POWER: HOW GOLDMAN SACHS CAME TO RULE THE WORLD 15 (2011).

^{2.} See, e.g., Tamar Frankel, The Failure of Investor Protection by Disclosure, 81 U. CIN. L. REV. (forthcoming 2013) ("As promises and institutional structures have become increasingly complex, so did disclosure about the promises that the institutions design or offer."); Henry Hu, Too Complex to Depict? Innovation, "Pure Information," and the SEC Disclosure Paradigm, 90 TEX. L. REV. 1601 (2012) (arguing that modern financial innovation has rendered disclosure that is "far more complex" than before, requiring other means of regulation); Richard E. Mendales, Collateralized Explosive Devices: Why Securities Regulation Failed to Prevent the CDO Meltdown, and How to Fix It, 2009 U. ILL. L. REV. 1359, 1362 (2009) ("[T]he crisis began and has been fueled by the fact that CDOs with top ratings turned out to be worth far less than their face amounts—and in the end proved hard to value at all. This failure in transparency is a classic securities law problem."); Steven L. Schwarcz, Disclosure's Failure in the Subprime Mortgage Crisis, 2008 UTAH L. REV. 1109, 1110 (2008) [hereinafter Schwarcz, Disclosure's Failure] ("Most, if not all, of the risks giving rise to the collapse of the market for securities backed by subprime mortgages were disclosed, yet the disclosure was insufficient, in part because complexity made the risks very difficult to understand.");

observers have noted that disclosures were sometimes false or incomplete.³ What follows these issues, to some commentators, is that, whatever other lessons we may learn from the crisis, we need to improve disclosure.⁴ How should it be improved? Commentators often lament the frailties of human understanding, notably including those of everyday retail investors—people who do not understand or even read disclosure. This leads, naturally and unsurprisingly, to prescriptions for yet more disclosure, simpler disclosure, and financial literacy education.⁵

But the securities at issue in the crisis were generally not sold to retail investors, who might be expected not to read or understand disclosures. Rather, they were mostly sold to sophisticated institutions. Even publicly traded securities such as residential mortgage-backed securities (RMBS) were sold in large denomination units that typical retail investors could not have bought. Many transactions, notably collateralized debt obligations (CDOs), were private, sold only to sophisticated investors. Securities laws rely on the assumption that sophisticated investors read and understand securities disclosures. If they do not understand, as some commentators have suggested, they should recognize that they do not. They should not buy a security until and unless they understand the

Steven L. Schwarcz, Regulating Complexity in Financial Markets, 87 WASH. U. L. REV. 211 (2009). These types of criticisms were also made prior to the financial crisis. See Troy A. Paredes, Blinded by the Light: Information Overload and Its Consequences for Securities Regulation, 81 WASH. U. L. Q. 417 (2003); Steven L. Schwarcz, Rethinking the Disclosure Paradigm in a World of Complexity, 2004 U. ILL. L. REV. 1 (2004).

^{3.} See FIN. CRISIS INQUIRY COMM'N, FINANCIAL CRISIS INQUIRY REPORT 170 (2011) ("Prospectuses for the ultimate investors in the mortgage-backed securities did not contain this information [about the quality of the mortgages], or information on how few loans were reviewed, raising the question of whether the disclosures were materially misleading, in violation of the securities laws."); Charles W. Murdock, Why Not Tell the Truth?: Deceptive Practices and the Economic Meltdown, 41 Loy. U. Chi. L.J. 801, 851 (2010); Press Release, Sec. & Exch. Comm'n, Goldman Sachs to Pay Record \$550 Million to Settle SEC Charges Related to Subprime Mortgage CDO (July 15, 2010), available at http://www.sec.gov/news/press/2010/2010-123.htm; see also Robert B. Thompson, Market Makers and Vampire Squid: Regulating Securities Markets After the Financial Meltdown, 89 WASH. U. L. REV. 323 (2011) ("In modern securities markets, a focus on disclosure by issuers alone has come up short.").

^{4.} See, e.g., Jonathan G. Katz, Reviewing the SEC, Reinvigorating the SEC, 71 U. PITT. L. REV. 489 (2010). It also includes less disclosure insofar as the problem is identified as information overload. See Omri Ben-Shahar & Carl Schneider, The Failure of Mandated Disclosure, 159 U. PENN. L. REV. 647 (2011).

^{5.} See, e.g., Jeffrey T. Dinwoodie, Ignorance Is Not Bliss: Financial Illiteracy, the Mortgage Market Collapse and the Global Economic Crisis, 18 U. MIAMI BUS. L. REV. 181 (2010) (recommending presidential and congressional action to enhance financial literacy in the wake of the financial crisis). Another proposed remedy is better disclosure that takes the form of less disclosure. See Ben-Shahar & Schneider, supra note 4, at 743-44.

disclosures.⁶ The investors had ample opportunity to engage with the sellers of the securities. Indeed, they could perform due diligence until they were satisfied that they were making sensible investment decisions. These investors included the "dumb" sophisticated investors that some, including Michael Lewis, have depicted as dupes lured into bad subprime investments by more sophisticated parties. Notably however, these duped investors also included the savviest of hedge funds and other extremely smart investors.⁷

Moreover, even though the transaction structures were complex, especially the CDOs, the complexities were generally not what subsequently caused large losses. The significant decline in value of the collateral supporting the securities caused the large losses. The collateral was typically identified in the disclosure documents, and the documents warned that investors should do their own due diligence. We do not claim that collateral quality was never misrepresented, nor do we claim that the disclosures always passed muster under securities laws. Stated differently, we are not claiming that investors were always given perfect information. But the information they were given should have made

^{6.} See Schwarcz, Disclosure's Failure, supra note 2, at 1110. The assumption that sophisticated investors read and understand disclosure is a critical one for the overall capital markets regulatory scheme. If disclosure is not informing sophisticated investors, what is it doing? And how will law limit investments in low-quality instruments? The answers to these questions are, respectively, not much and with great difficulty. We think that some sophisticated investors always read and understand disclosure, and that many read and understand it well enough in the normal course, but that in overheated markets, many sophisticated investors may follow their peers, the herd, in making their investment decisions, reading disclosure cursorily and perhaps only after the fact.

^{7.} An oft-quoted part of Lewis's book relayed a conversation between two hedge fund managers and an investment banker at Deutsche Bank who were talking about who was buying the long side of CDOs as follows: "It's zero sum. Who's on the other side? Who's the idiot? Düsseldorf. Stupid Germans." MICHAEL LEWIS, THE BIG SHORT: INSIDE THE DOOMSDAY MACHINE 93 (2011). Another anecdote along the same lines (and concerning the same investor, IKB) is from William Cohan's book on Goldman Sachs: "A former IKB credit officer, James Fairrie, told the Financial Times that the pressure from higher-ups to buy CDOs from Wall Street was intense. 'If I delayed things more than 24 hours, someone else would have bought the deal' he said. Another CDO investor told the paper, though, that IKB was known to be a patsy." COHAN, supra note 1, at 15.

^{8.} This was admittedly not an easy task, given that the collateral was pools of many mortgages. But surely, that doing due diligence is not easy cannot justify not doing it, or not doing it well: the rationale of disclosure is not consistent with an exception when the disclosure is too hard.

^{9.} For discussions of the litigation surrounding the ABACUS and Class V Funding III CDOs, see *infra* Part II.B. But the SEC recently terminated two mortgage-related investigations against Goldman Sachs. This was cited as a sign that the SEC would be unable to bring any meaningful action "aimed at punishing Wall Street for its role in the crisis." Ben Protess & Azam Ahmed, S.E. C. and Justice Dept. End Mortgage Investigations Into Goldman, N.Y. TIMES DEALBOOK, (Aug. 9, 2012), http://dealbook.nytimes.com/2012/08/09/goldman-says-sec-has-ended-mortgage-investigation/; see also Peter Henning, Is That It for Financial Crisis Cases?, N.Y. TIMES DEALBOOK (Aug. 13, 2012), http://dealbook.nytimes.com/2012/08/13/is-that-it-for-financial-crisis-cases/. Nobody knows the extent to which crisis-related lawsuits will be successful. There have been some recent high-profile cases, including one brought by the New York Attorney General under New York's

them warier than it did or otherwise should have spurred additional investigation. Indeed, considerable evidence exists that in a variety of complex securities transactions, investors made decisions quickly, without thorough due diligence and without fully using the information provided; this behavior amounted to a seemingly conscious disregard of the risks. There were, of course, some savvy investors who carefully read the disclosure documents, did extensive due diligence, and made a great deal of money. Much of the money made was earned on well-timed bets that subprime securities would decline in value. Disclosure thus did enable some people to make "correct" bets, but this should not count as success. The market did not just recede to solid ground—it crashed. Whatever one may say about whether its present level is appropriate, the economy has suffered considerable damage.

Those making the investment decisions at issue were sophisticated investors. There is no policy reason to be solicitous of sophisticated investors for their own sake. The conduct here—fueling a bubble—presents a societal problem because the sophisticated investors' actions have harmed others. Many sophisticated investors were investing on behalf of others who may warrant societal solicitousness. Moreover, the effects of sophisticated investors' acquisitions of these securities have been disastrous for the broader society, perhaps by causing, and certainly by exacerbating, the financial crisis.¹²

notoriously broad Martin Act, Schneiderman v. JP Morgan Sec. LLC, No. 451556 (N.Y. Sup. Ct. filed Oct. 1, 2012), against JP Morgan in its capacity as acquirer of Bear Stearns, for, among other things, misrepresenting the due diligence done with respect to mortgages including in Bear's mortgage-backed securities. Some private cases, too, are proceeding, alleging material misrepresentations or fraud claims. See Dodona I, LLC v. Goldman Sachs & Co., 847 F. Supp 2d. 624 (S.D.N.Y. 2012); Basis Yield Alpha Fund (Master) v. Goldman Sachs Grp., Inc., No. 652996 (N.Y. Sup. Ct. Oct. 18, 2012). We do think, though, that some settlements, such as the ABACUS one for \$550 million, may reflect as much or more the political interests of the SEC and the settling party than the existence of materially false disclosure. \$550 million may sound like a lot of money. It is certainly more than a "rounding error," Stephen Lubben's description of the payments required under some of these set-Why Bother?, CREDITSLIPS (Aug. Stephen Lubben, http://www.creditslips.org/creditslips/2012/08/why-bother.html. But it is not large relative to Goldman's revenues and profits. Goldman may have settled because, whether or not they violated the law, a trial would have been expensive, both in terms of money and in terms of Goldman's reputation.

^{10.} We discuss this further in Part II.A below.

^{11.} Of course, some savvy investors who carefully read disclosure documents lost a great deal of money too; even those who had the same general conclusions as those who made money might have suffered losses if, for instance, their timing was "off." This almost happened to Michael Burry, an investor discussed in Michael Lewis's *The Big Short. See* LEWIS, *supra* note 7, at 26-46.

^{12.} Here we agree with John Coffee and Hillary Sale that the financial crisis is in some respects a failure of sophisticated investors to act in their presumed gatekeeping role. See John C. Coffee, Jr. & Hillary A. Sale, Redesigning the SEC: Does the Treasury Have a Better Idea, 95 VA. L. REV. 707 (2009).

We believe that improvements in disclosure will not do much to prevent or minimize the effects of future crises. Indeed, the role of disclosure in investment decisions is far more limited, and far less straightforward, than is typically assumed. To caricature a bit for ease of exposition, the straightforward story is as follows: Read carefully, understand what you read, conduct any additional inquiry you deem appropriate, and then decide—if the security seems good, buy it; if not, don't. Also, consider that whoever is selling you the security knows more than you do about it and has an incentive to present it more favorably than it warrants. But many investors, even sophisticated investors, do not start with cautious or neutral presumptions about a security and do not carefully read the disclosure to appraise the security on its merits before deciding whether to invest. As the literature extensively discusses, investors may be eager to buy "the hot new thing" that their peers are buying. 13 Why do the peers buy it? One part of the story may be the old and often-told explanation: some investors tired of "boring" returns, saw an opportunity to supercharge their yields, and believed the perennial pitch made for new financial instruments—that they offered more return than risk.¹⁴ But our aim is not to explain what motivated investor behavior; our aim is to point out what did not sufficiently motivate investor behavior.

Our argument is not just about the present crisis. Indeed, the complex role that disclosure plays in an investor's decision as to whether to buy a security is just one example of disclosure's limits. Those limits reflect the complexity of human decisionmaking. Why should disclosure work? The obvious answers are that better information should make for better decisions and that the specter of disclosure should constrain behavior. But these answers are importantly incomplete. Better information should, in principle, lead to better decisions, but other factors may be far more important. This was the case with disclosure regarding the securities at issue in the financial crisis. We discuss another example as well: executive compensation disclosures.

^{13.} See Judith Chevalier & Glenn Ellison, Career Concerns of Mutual Fund Managers, 114 Q. J. ECON. 389, 389 (1999) (finding that the probability of manager termination "decreases steeply with performance when managers have negative excess returns, but it is fairly insensitive to differences at positive excess return levels").

^{14.} See Steven Lohr, Wall Street's Math Wizards Forgot a Few Variables, N.Y. TIMES, Sept. 13, 2009, at BU3 (asserting that prior to the financial crisis, mathematical financial models failed to "sufficiently take into account...human behavior, specifically the potential for widespread panie"); see also Steven Lohr, In Modeling Risk, the Human Factor Was Left Out, N.Y. TIMES, Nov. 4, 2008, at B1 (asserting that during the financial crisis "while markets were booming, the incentives on Wall Street were to keep chasing profits by trading more and more sophisticated securities, piling on more debt and making larger and larger bets").

Executive compensation is high by many metrics. In some sense, company shareholders are the ones paying the compensation. Many people argue that providing shareholders with more detailed information would cause them to seek to curtail compensation in some way, perhaps by pressuring, or selling their stakes in, companies with high compensation in which they own shares. Anticipating shareholder reaction, companies would preemptively curtail their compensation. That has been the theory behind more expansive executive compensation disclosures, but it has apparently not been the reality. The incremental information apparently has not prompted shareholder action, but appears to have prompted action by peer CEOs—to put pressure on their boards to raise their pay.

The two examples, taken together, serve to elucidate our broader point. Underlying the rationale for disclosure are commonsense views about how people make decisions. But these views turn out to be importantly incomplete. The theory as to why disclosure should work in particular types of cases may be more reflexive than considered. In the subprime example, and in the case of "hot" securities generally, decisionmaking was importantly social, but the theory assumed it worked on an individual level. In the executive compensation example, disclosure was supposed to trigger, in some simple way, particular reactions in investors and companies. Their reactions were apparently not what was predicted, nor was the reaction of CEOs.

This does not argue for making considerably less use of disclosure, nor does it argue against disclosure generally. But it does sound some cautionary notes. Solutions are hard to come by and as hard, if not harder, to agree upon. A solution emphasizing disclosure can give the appearance of "doing something" when nobody can agree on anything else. It is not just policymakers who benefit from a disclosure "solution." The emphasis on disclosure affirms a too-comforting worldview. People losing money on investments can tell themselves and others that if they had been given enough information, they would not have bought the securities. Market participants can state that their purported *modus operandi*, making investment decisions upon reading disclosure documents, is viable.

The strong allure of the disclosure solution is unfortunate, although perhaps unavoidable. The nebulous bottom line is this: disclosure is too often a convenient path for policymakers and many others looking to take action and hold onto comforting beliefs in the face of a bad outcome. Disclosure's limits reveal yet again the need for a better understanding of the relationship between information processing and decisionmaking and more broadly, for a more nuanced view of human nature that can better inform policy decisions.

II. THE RISE OF DISCLOSURE AND ITS LIMITS

This Part briefly describes the role of disclosure under the federal securities laws. The subject does not warrant more than a brief mention in this Article; a student in the first week of securities regulation is immediately taught the maxim, "sunlight as disinfectant." We turn in the remainder of this Part to two areas in which disclosure arguably failed, albeit for very different reasons: synthetic CDOs sold in the years immediately leading up to the financial crisis, and executive compensation. With CDOs, disclosure did not work the way it was intended to work—the way the securities laws rely on it to work. With executive compensation, not only did the disclosure not work the way it was intended to work, we believe it may have had negative effects.

A. The Role of Disclosure Under the Federal Securities Laws

Disclosure is the *sine qua non* of the federal securities law.¹⁵ The Securities Act of 1933 and its companion Securities Exchange Act of 1934 were modeled on the British Companies Act of 1928–1929 and heavily influenced by the prior work of Louis Brandeis, the Supreme Court Justice and crusading attorney.¹⁶ Brandeis had famously advocated for full disclosure concerning securities issuances, stating that "sunlight is said to be the best of disinfectants."¹⁷ The context was disclosure of excessive banker commissions from the sale of stock, but Brandeis clearly held the view with respect to disclosure generally. The quote suggests that when something is viewed in bright light, it will be seen for what it is. Disinfecting will result. Those thinking to foist something infected on the markets will know that they cannot succeed, and if they try, market participants will recognize the attempt and avoid the infected thing.

The 1933 and 1934 Acts have always been very much focused on disclosure; reading through the legislative history, one is struck by the repeated use of words and phrases such as "full publicity and information," which tie disclosure and finance inextricably to the integrity of the markets. In this vein, the legislative battles over the securities law during this time were not about the value of disclosure or its status as ensuring a robust capital market, but instead over the propriety of civil

^{15.} In their treatise, Louis Loss and Joel Seligman, later joined by Troy Paredes, characterize the laws as requiring "disclosure, again disclosure, and still more disclosure." LOUIS LOSS ET AL., SECURITIES REGULATION 8 (2004).

^{16.} Fredrich Kessler, The American Securities Act and Its Foreign Counterparts: A Comparative Study, 7 YALE L.J. 1133 (1935).

^{17.} Louis D. Brandeis, What Publicity Can Do, HARPER'S WKLY, Dec. 20, 1913.

^{18.} H.R. Doc. No. 12 (1933).

penalties for violating disclosure rules. 19 Disclosure's efficacy was assumed.

The focus on disclosure has continued, and continues today. The Securities and Exchange Commission (SEC) began to require financial projections, extensive management-discussion-and-analysis (MD&A) sections, and enhanced executive compensation disclosure. ²⁰ It pushed for preemption of state laws requiring merit review of securities offerings, ²¹ reflecting its view that investors were sufficiently protected by disclosure. It focused on making information more readily available, including through the EDGAR electronic filing and retrieval system. ²² These are but a few examples of the heavy emphasis the SEC and other regulators of our capital markets placed on disclosure. Indeed, until the relatively recent emphasis on behavioral factors, the main debate about disclosure concerned the extent to which the government should require it, or whether society was better served if market forces determined the form and content of disclosure. ²³ It was unquestioned that the "sunlight" provided by disclosure would lead to better investment decisions.

Attitudes toward disclosure remain largely unchanged by events occurring during and after the technology bubble and the financial crisis. The dot-com bubble of 2000 sparked a reassessment of the efficient market hypothesis upon which the requirements of disclosure were premised: given that investor bidding grossly inflated the valuations of companies

^{19.} J. SELIGMAN, THE TRANSFORMATION OF WALL STREET 77-81 (1982).

^{20.} See, e.g., Executive Compensation and Related Person Disclosure, Securities Act Release No. 8732A, Exchange Act Release No. 54302A; Investment Company Act Release No. 27444A, 71 Fed. Reg. 53,158, 53,159-60 (Sept. 8, 2006) [hereinafter Executive Compensation Release 2006]; Disclosure and Management's Discussion and Analysis About the Application of Critical Accounting Policies, Securities Act Release No. 8098, Exchange Act Release No. 45907, 2002 SEC LEXIS 1271 (May 10, 2002).

^{21.} See Hugh F. Owens, Comm'r, Sec. & Exch. Comm'n, Address on the Securities Acts of 1964 at the Practising Law Institute (Oct. 16, 1964) (transcript available at http://www.sec.gov/news/speech/1964/101664owens.pdf).

^{22.} For a history of the SEC's adoption of EDGAR, see Rulemaking for EDGAR System, Securities Act Release No. 8590; Exchange Act Release No. 52052; Investment Company Act Release No. 26990; Public Utility Holding Company Act Release No. 28002; Trust Indenture Act Release No. 39-2437, 70 Fed. Reg. 43,558 (July 18, 2005).

^{23.} See, e.g., HENRY MANNE & E. SOLOMON, WALL STREET IN TRANSITION (1974); HENRY MANNE, INSIDER TRADING AND THE STOCK MARKET (1966); George J. Stigler, The Value of the SEC's Accounting Disclosure Requirements, 44 ACCT. REV. 515 (1969); George J. Stigler, Public Regulation of the Securities Markets, 37 J. BUS. 117 (1964). The argument took different forms, but typically cited market forces as efficiently producing more optimal disclosure than mandatory requirements under the federal securities laws. Jack Coffee, Joel Seligman, and others countered with various arguments that invoked both market inefficiencies as well as attacks on the empirical evidence cited by opponents of mandatory disclosure. See John C. Coffee, Jr., Market Failure and the Economic Case for a Mandatory Disclosure System, 70 VA. L. REV. 717 (1984); Joel Seligman, The Historical Need for a Mandatory Corporate Disclosure System, 9 J. CORP. L. 1 (1983).

that disclosed they had no income, revenue, or near-term prospects, it became hard to claim that stock prices reflected all publicly available information. ²⁴ But the bubble did not result in a broader skepticism about the extent to which investors use disclosure for its intended purposes. ²⁵ We think it should have, and that the entrenched and intuitive nature of disclosure's role—the stake policymakers, investors, and the greater society have in disclosure's efficacy—is why it didn't. ²⁶

The federal securities laws have also continued to emphasize disclosure. Professor Jeffrey Gordon documented the increase in length of disclosure documents from 1950 to 2004. During that time period, the average number of pages from a sample of Fortune 500 company 10-Ks went from almost sixteen pages to a little over 166 pages with the average number of financial pages increasing from 4.41 to 38.15 pages.²⁷ From 1974 to 2004, the number of MD&A pages went from 1.88 to 24.05.²⁸ The increasing length of disclosure documents reflects the increasing emphasis on disclosure in federal regulations.²⁹

^{24.} See ROBERT J. SHILLER, IRRATIONAL EXUBERANCE (2000); see also Kcn Brown, For Dot-Coms, New Names Are Good for a Pop, WALL St. J., Dcc. 18, 2002, at C1

^{25.} The regulatory response to the collapse of the technology bubble and the Enron and WorldCom scandals instead focused on substantive remedies such as auditor independence, separation of analyst research from other investment bank areas, and a general enhancement of auditing standards.

^{26.} That many investors in dot-com stocks were retail investors rather than sophisticated investors offers a way to reconcile what happened in the bubble with a continuing reliance on disclosure. This difference might permit retaining the standard narrative of disclosure's efficacy in a market comprised mostly of sophisticated investors. See, e.g., Eli Ofek & Matthew Richardson, DotComMania: The Rise and Fall of Internet Stock Prices, 58 J. FIN. 1113, 1121 (2003) (documenting abnormally higher retail participation in IPOs during the technology bubble). There are other ways to retain the narrative, including the standard ones involving limits on shorting, and regulation. Yet another way is to argue that the sophisticated investors did understand that technology stocks were enormously overvalued, but could not or did not try to time when the bubble would pop. See generally Claire A. Hill, Why Financial Appearances Might Matter, 22 DEL. J. CORP. L.141, pt. IV A.2 (1977). Still, just as with subprime securities, it seems hard to explain away all the nonretail investor involvement in the market. One might try to define sophistication almost tautologically, pointing to the not inconsiderable "smart money" that did shun tech stocks or seek to make money betting they were overvalued. But our argument is not that nobody could or did understand the disclosure. It is that people who the securities laws rely on reading and understanding the disclosure did not do so.

^{27.} Jeffrey N. Gordon, The Rise of Independent Directors in the United States, 1950-2005: Of Shareholder Value and Stock Market Prices, 59 STAN. L. REV. 1465, app. (2007).

^{28.} *Id*.

^{29.} We acknowledge that increasing length reflects other factors. One of us has written about increasing length of contract documents and believes that many of the same arguments can be made here. See Claire A. Hill & Christopher King, How German Contracts Do as Much With Fewer Words, 79 CHI.-KENT. L. REV. 889 (2004); Claire A. Hill, Why Contracts Are Written in Legalese, 77 CHI.-KENT. L. REV. 59 (2002). One notable cause for the length of risk factors may be lawyer attempts to limit client exposure for a transaction that performs badly. Interestingly for our thesis,

Even for transactions not subject to the mandatory disclosure provisions of the federal securities laws, these provisions strongly influence the contents of the disclosure documents given to investors. Lawyers often interpret materiality to include what SEC-mandated disclosure requires, even for offerings where the disclosure is not mandated. As a result, prospectuses for offerings to sophisticated investors typically include disclosure similar to the disclosure in documents for public offerings. Disclosure requirements have been strengthened in response to the crisis. In particular, the Dodd-Frank Act has strengthened disclosure requirements for some previously private markets.³⁰

To state the obvious, considerable time and trouble is spent on formulating disclosure requirements and complying with them. There is an uneasy contrast between elaborately formulated and drafted disclosure on the one hand and its limited effects on the other. We highlight these contrasts in the next section.

B. The Case of Synthetic CDO Disclosure

Of the many financial instruments involved in the crisis, we focus in this section on synthetic CDOs with mortgage-backed securities as their reference collateral. These synthetic CDOs were overwhelmingly private transactions sold to large, sophisticated investors who dealt directly with the banks structuring the offerings. These transactions played a significant role in the financial crisis when their value substantially declined.³¹ From 2004 through 2007, CDO issuance rose dramatically. In 2004, global CDO issuance was \$58.5 billion; by 2006, issuance rose to \$231.7 billion. Transaction volume stayed high even in 2007, only declining to \$176.8 billion in offerings.³² Many CDO transactions per-

one reason why lawyers' attempts to detail possible risks can yield such long risk factor sections is precisely because risk factors can and usually are articulated in a manner that technically informs but is easy for people to discount.

^{30.} This includes public clearing for most derivatives. See Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), Pub. L. No. 111-203, 124 Stat. 1376 (2010).

^{31.} See Protess & Ahmed, supra note 10 (quoting Robert Khuzami, head of enforcement at the SEC, as stating "[m]ortgage products were in many ways ground zero in the financial crisis").

^{32.} Gary Gorton, The Panic of 2007 40 (Yale Int'l Ctr. for Fin., Working Paper No. 08-24, 2008), available at http://papers.ssm.com/sol3/papers.cfm?abstract_id=1255362. There was only one CDO deal in 1999; forty five were priced and sold in 2003, and by 2006 there were 223 CDOs priced and sold. See Larry Cordell et al., Collateral Damage: Sizing and Assessing the Subprime CDO Crisis (Fed. Reserve Bank of Phila., Working Paper No. 11-30, 2011), available at http://ssrn.com/abstract=1907299; see also Robert A. Jarrow, The Role of ABS, CDS and CDOs in the Credit Crisis and the Economy, in ECONOMIC LESSONS FROM THE FINANCIAL CRISIS (A. Blinder et al. eds., forthcoming Sept. 2012), available at http://www.russellsage.org/sites/all/files/Rethink ing-Finance/Jarrow%20ABS%20CDS%20CDO%202.pdf_CDO-squared deals—those engineered

formed disastrously, including Goldman Sachs's ABACUS, Citigroup's Class V Funding III, and CDOs in which Magnetar invested (discussed below). One analysis estimates that asset-backed CDO write-downs will be \$420 billion or 65% of the original balance, with CDOs issued in 2007 losing 84% of their original value.³³

One common explanation for why investors bought these CDOs is that disclosure was insufficient and even misleading. This section proposes a different explanation. Many investor purchasing decisions did not reflect careful consideration and examination of the disclosure documents. Had investors carefully considered the documents and the transactions on the merits, they might have made different decisions.³⁴

In the years leading up to the financial crisis, investors displayed an enormous appetite for these securities, notwithstanding disclosures that highlighted significant risks.³⁵ Indeed, there is evidence that investor appetite was so great that new issuances were quickly bought, without much regard to the disclosure, despite continuing declines in credit quality. Consider in this regard a quote from William Cohan's book on Goldman Sachs:

A former . . . credit officer [of an entity that was a frequent purchaser of CDOs, including interests in ABACUS, described below], James Fairrie, told the Financial Times that the pressure from higher-ups to buy CDOs from Wall Street was intense. "If I delayed things more than 24 hours, someone else would have bought the deal" he said.³⁶

primarily from the tranches of other CDOs—grew from thirty six marketwide in 2005, to forty eight in 2006, and to forty one in 2007. See FIN. CRISIS INQUIRY COMM'N, supra note 3, at 203.

^{33.} See Cordell et al., supra note 32, at 3.

^{34.} One paper argues that money managers buying the securities could have understood the disclosures but were responding to pressure from biased investors whose money they managed. See Nicola Gennaioli, Andrei Shleifer & Robert Vishny, Money Doctors (Nat'l Bureau of Econ. Res., Working Paper No. 18174, 2012), available at http://www.economics.harvard.edu/faculty/shleifer/files/moneydoc_061112.pdf. The authors, Nicola Gennaioli, Andrei Shleifer, and Robert Vishny, argue that "managers pander to investors when investors exhibit biases in their beliefs, and do not correct misperceptions, and . . . despite long run benefits from better performance, the profits from pandering to trusting investors discourage managers from pursuing contrarian strategies" Id. at 1. In our view, this may be correct with respect to some investors, but, we think, not all and probably not even most investors. We don't think investors have their own sufficiently formed views that could be "pandered to," at least as to the instruments at issue here. Even if some people purchasing the securities "know" better than their purchase would suggest, disclosure is not in any simple way motivating action.

^{35.} Transcript of Trial at 343, SEC v. Stoker, No. 11 Civ. 7388 (S.D.N.Y. argued July 2012) [hereinafter Class V Funding III Trial Transcript] (containing testimony by a Citigroup banker that in 2006 and early 2007 there was growing demand to buy synthetic CDOs which referenced mortgage-backed securities).

^{36.} See COHAN, supra note 1, at 15.

At times, investors seemed far more concerned with being able to buy securities in a particular type of transaction than with investigating whether a particular transaction's securities were worth buying. Indeed, investors often "committed" to buy securities when the disclosure documents were not even in existence; it was not unusual for the documents to be prepared and finalized shortly before the securities were sold. To example, the offering memorandum for the Class V Funding III CDO discussed below was completed only two days before the deal priced. To be clear, last-minute completion of offering documents is not uncommon in many transactions. The difference here, according to our research and discussions with prominent market participants, is that the information investors had well before the last minute indicated the need for careful review of the investment—a review that often did not occur.

Several high-profile cases have been brought against investment banks that sold the securities. Cases involving some CDOs have vielded settlements with the SEC, including \$550 million paid by Goldman Sachs in connection with the ABACUS transaction and \$285 million paid by Citigroup in connection with the Class V Funding III transaction.³⁹ Allegations against banks structuring and selling CDOs have included, among other things, that the disclosures were defective. For instance, Goldman acknowledged that "the marketing materials for [ABACUS] included incomplete information," which Goldman "regrets."40 Notwithstanding Goldman's acknowledgment, we think the disclosure, together with what investors knew simply by virtue of the structure of the transaction, should have sufficed to make investors far warier than they were or lead them to do further investigation.⁴¹ Investors knew that someone was making a big bet against the very portfolio on which they were betting. The disclosure documents provided them with many reasons to want to thoroughly investigate why someone would want to bet against the portfolio.⁴² Our point, again, is not that CDO or other dis-

^{37.} Class V Funding III Trial Transcript, supra note 35, at 71.

^{38 14}

^{39.} In both instances, the transactions and settlements were made by the broker-dealer subsidiaries of each investment bank. In the case of Citigroup, the broker-dealer entity was Citigroup Global Markets, Inc., and in the case of Goldman Sachs Group Inc., it was Goldman Sachs & Co. For purposes of this article, a reference to Citigroup or Goldman Sachs is also intended as a reference to the broker-dealer subsidiary and any other affiliates.

^{40.} See Press Release, Sec. & Exch. Comm'n, supra note 3.

^{41.} See generally Steven M. Davidoff et al., Computerization and the ABACUS: Reputation, Trust, and Fiduciary Duties in Investment Banking, 37 J. CORP. L. 101 (2012).

^{42.} As we discuss in the text accompanying notes 59-60, the other side could be hedging other investments without having an affirmative view that the portfolio was of low quality. But the other side also could be, and in fact was, making a bet based on the quality of the portfolio.

closures in the crisis were perfect or could not have been improved upon. But junk was not depicted as gold or even as bronze. The disclosures, notably including the ABACUS disclosure, had significant caveats and red flags that should have caused investors to tread more carefully than they did.

The formal name for ABACUS is ABACUS 2007-AC1.⁴³ The transaction was arranged and sold by Goldman Sachs. It was a "synthetic CDO"—a bet on the performance of mortgages (more accurately, mortgage-backed securities comprised of mortgages) that were owned by someone else.⁴⁴ These securities are called "reference securities." Because the transaction was synthetic, it could only proceed if there were bets placed on both sides—that the mortgages would perform well and that they would not.

ABACUS securities were offered only to Qualified Institutional Buyers (QIBs) as defined under the securities laws. These were investors with more than \$100 million in liquid assets. The QIBs who bought the ABACUS securities were German and Dutch banks. The transaction performed very badly, and the buyers suffered over one billion dollars in losses.

But one transaction participant made huge gains: John Paulson. His hedge fund effectively bought the "short" position, betting that the securities would lose value. Paulson had a very skeptical and accurate view of mortgage securities in general. He had conducted a careful analysis, both of the mortgage market and of particular originators and other market participants. He used that analysis to build a CDO with securities that he believed were particularly prone to default.⁴⁶

The buyers made their purchases notwithstanding disclosure that emphasized many possible risks.⁴⁷ One risk factor disclosed in the

^{43.} See Goldman Sachs & Co., ABACUS 2007-AC1, Ltd. Offering Memorandum (Apr. 26, 2007) [hereinafter ABACUS Offering Memo 2007], available at http://www.scribd.com/doc/30414220/ABACUS-Offer-Document.

^{44.} Id.

^{45.} See Complaint, SEC v. Goldman Sachs & Co., 790 F. Supp. 2d (S.D.N.Y. 2010) (No. 10 Civ. 3229) [hercinafter SEC Complaint].

^{46.} The SEC alleged that Paulson, who had every incentive to cause ABACUS to consist of low-quality securities, was actually involved in selecting those securities, and his involvement was not disclosed to the buyers of ABACUS. See Press Release, Sec. & Exch. Comm'n, supra note 3. A civil lawsuit brought in New York state court by ACA Financial Guaranty Corp., the insurer of the ABACUS CDO, against Goldman over similar allegations survived a motion to dismiss and is currently pending. See Grant McCool, Fraud Lawsuit Survives over Goldman's ABACUS CDO, REUTERS (Apr. 24, 2012), http://www.reuters.com/article/2012/04/24/us-goldman-abacus-ruling-idUSBRE83N1AM20120424.

^{47.} See ABACUS Offering Memo 2007, supra note 43, at 32–33 (warning of possible conflicts of interest by Goldman Sachs and its affiliates).

ABACUS offering memorandum was that "no information concerning the underlying reference securities [was] being provided and the Goldman and the portfolio selection agent may have their own non-public material information about these securities."48 The ABACUS offering memorandum disclosed that the CDO would initially reference ninety different obligations and set forth each by name, allowing for further due diligence. 49 The memorandum also disclosed that "[t]he actual residential mortgage-backed securities underlying the reference obligations might be concentrated in only a few states or regions."50 The offering memo even stated that "[r]ecently, delinquencies, defaults and losses on residential mortgage loans have increased and may continue to increase, which may affect the performance of RMBS, in particular RMBS Residential B/C Mortgage Securities which are backed by subprime mortgage loans."51 This last risk factor, the mortgage market risk factor, apparently began to appear in CDO offering memoranda in early 2007. Indeed, it appears in another controversial Goldman CDO deal, Timberwolf.⁵² Both the ABACUS and Timberwolf offering memoranda stated that "numerous residential mortgage loan originators that originate subprime mortgage loans have recently experienced serious financial difficulties and in some cases bankruptcy."53

The ABACUS offering memorandum also included risk factors about conflicts of interest. The offering memorandum disclosed that Goldman "may hold long or short positions with respect to" the underly-

^{48.} Id. at 25. Long risk sections are common in disclosure documents. Whether they get the attention they might seem to warrant is a complex question. Certainly, scary risks are routinely disclosed to people in any number of contexts, and those disclosures don't seem in some sense to be taken seriously. People have a narrative as to why the risk is overstated, for instance. Consider the risk factors listed on any medication label or the liability disclaimers for many sports activities. The broader inquiry of how to alert people to risks in an effective manner is beyond the scope of this Article. For general information on the topic, see ROGER SHUY, BUREAUCRATIC LANGUAGE IN GOVERNMENT AND BUSINESS (1998).

^{49.} ABACUS Offering Memo 2007, supra note 43, app. A.

^{50.} Id. at 28

^{51.} Id. at 30.

^{52.} See Narayanan Somasundaram & Jonathan Stempel, Goldman Sued for \$1.07 Billion over Timberwolf CDO, REUTERS (Oct. 28, 2011), http://www.reuters.com/article/2011/10/28/usgoldmansachs-lawsuit-idUSTRE79R4JE20111028. Goldman Sachs was sued by the Australian hedge fund Basis Yield Alpha Fund for allegedly making fraudulent statements to induce the fund to invest in the Timberwolf CDO. The case was dismissed on jurisdictional grounds before reaching the merits. See Basis Yield Alpha Fund (Master) v. Goldman Sachs Group, Inc., 798 F. Supp. 2d 533 (S.D.N.Y. 2011). But a new complaint by Basis Alpha on the same facts in state court has survived a motion to dismiss. Basis Yield Alpha Fund (Master) v. Goldman Sachs Grp., Inc., No. 652996 (N.Y. Sup. Ct. Oct. 18, 2012). We discuss that complaint further in note 66 below.

^{53.} Goldman Sachs & Co., Timberwolf 2007-1, Ltd. Offering Memorandum 51 (Mar. 23, 2007), available at http://www.scribd.com/doc/30545658/twolf.

ing securities of the CDO.⁵⁴ The ABACUS marketing materials also highlight this possible conflict:

Goldman Sachs is currently and may be from time to time in the future an active participant on both sides of the market and have long or short positions in, or buy and sell, securities, commodities, futures, options or other derivatives identical or related to those mentioned herein. Goldman Sachs may have potential conflicts of interest due to present or future relationships between Goldman Sachs and any Collateral, the issuer thereof, any Reference Entity or any obligation of any Reference Entity.⁵⁵

The ABACUS investors had other indications of potential Goldman conflicts in the ABACUS deal. The initial collateral security for the CDO was the CLO GWOLF 2007-1A, which was structured by Goldman. Many of the reference securities for the ABACUS CDO were other CDOs underwritten by Goldman. This cross-fertilization of CDOs, a common occurrence during the period before the financial crisis with CDOs circularly investing in one another, came back to haunt many buyers as the subprime crisis intensified and contagion quickly spread among linked CDOs. Security 100 contagion 1

The disclaimers, risk factors, and stated conflicts would by themselves counsel the need for extensive due diligence. Given that these transactions were synthetic CDOs, there was an additional reason: a considerable bet was being made that the portfolio would lose value. This point should not be overstated. After all, the buyer of the short position could just be hedging, with no strong affirmative view that the portfolio would fall in value. Every time somebody buys a security, somebody else, with perhaps more information than the buyer, is selling it, which suggests that extra diligence is always warranted. But the point should

^{54.} ABACUS Offering Memo 2007, supra note 43, at 40.

^{55.} Goldman Sachs & ACA Capital, ABACUS 2007-AC1 Flip-Book 8 (Fcb. 26, 2007), available at http://www.scribd.com/doc/30036962/Abacus-2007-Ac1-Flipbook-20070226.

^{56.} ABACUS Offering Memo 2007, supra note 43, at 71.

^{57.} Id. sched. A. See generally Karen Weise, Circular CDOs, PROPUBLICA (Aug. 26, 2010), http://projects.propublica.org/tables/circular edos.

^{58.} Tracy Alloway, Collateralized Contagion, FIN. TIMES ALPHAVILLE BLOG (Nov. 4, 2010, 12:18PM), http://ftalphavillc.ft.com/blog/2010/11/04/394416/collateralised-contagion/; Jake Bernstein & Jesse Eisinger, Banks' Self-Dealing Super-Charged Financial Crisis, PROPUBLICA (Aug. 26, 2010), http://www.propublica.org/article/banks-self-dealing-super-charged-financial-crisis. For a list of cross-collateralized CDO cross-ownership arising from the financial crisis, see Deals with CDO Cross Ownership (2006-7 Only), SCRIBD, http://www.scribd.com/doc/37952885/Cdo-Collateralized-Debt-Obligations-High-Risk-Trading-Cards (last updated Sept. 22, 2010). The Financial Crisis Inquiry Commission reports that in 2006 and 2007, the share of ABS CDO mezzanine tranches purchased by other CDOs exceeded 80%. See FIN. CRISIS INQUIRY COMM'N, supra note 3, supp. figs.

not be understated either. It was possible, and in fact was the case with ABACUS and many other synthetic CDOs in the 2006 and 2007 period, that the short position represented a well-informed bet by a sophisticated investor that the portfolio would decline in value. Indeed, in many cases, the counterparty taking the risk was initially the investment bank selling the long position; it might, or might not, hedge its exposure later. So investors already knew that the investment bank—Goldman or Citi—might be betting that the collateral was bad while selling them, the investors, the bet that the collateral was good. By 2007, it was apparently common knowledge among market participants that there were an increasing number of hedge funds looking to short synthetic CDOs. ⁵⁹ Reflecting the demand fueled by investors seeking to short, buyers of the long position were getting deals that promised higher returns; if they did not have the "common knowledge" as to the demand, the deal terms they were getting should have provided a valuable clue.

The buyers in these deals did make some use of the disclosure provided to them: they engaged with the sellers, asking some questions, making suggestions for deal terms, and requesting that some securities be included in or removed from the reference portfolio. It has been reported in at least one account of ABACUS's structuring that a potential buyer requested that certain securities related to Fremont and New Century Financial be excluded because of these subprime mortgage lenders' financial troubles. But certainly with hindsight, and we think in prospect as well, the buyers in these deals were too eager to buy, and what due diligence buyers did was not nearly as thorough as it should have been.

How much due diligence should they have done? Clearly, this is not an easy question to answer—beyond "more than they did" we do not have much to say. We fully recognize the perils of hindsight bias and do not want to simply conclude that because ABACUS and other synthetic CDOs turned out to be disastrous investments, any process that led to making these investments was somehow inadequate. We also do not want to conclude that any process that led to avoiding these investments

^{59.} Class V Funding III Trial Transcript, *supra* note 35, at 504. Particularly popular short targets included CDOs with Magnetar involvement and the "president" deals underwritten by Morgan Stanley. *Id.* at 455.

^{60.} Id. at 1228.

^{61.} See COHAN, supra note 1, at 536. This happened on the other side too, as short sellers also lobbied for selection of reference securities, perhaps with more energy and savvy than buyers. See, e.g., Magnetar Speaks, Defends Itself Preemptively, ZEROHEDGE (Apr. 20, 2010), http://www.zero hedge.com/article/magnetar-speaks-defends-itself-preemptively (quoting letter dated Apr. 19, 2010 from Magnetar Capital to investors, which attached emails showing Magnetar reviewing and lobbying for inclusion of certain reference securities in a potential CDO).

was therefore good. But we do think that many investors who bought synthetic CDOs did not ask enough questions, did not listen with a sufficiently critical ear to the answers, and did not sufficiently inform themselves before making investment decisions. In cases where investors provided significant input to banks on acceptable and unacceptable collateral, they could tell themselves that they had done a critical inquiry because they had objected to some possible collateral. We think that at least in some cases the inquiry cannot have been critical enough: they intended all along to buy the securities once they could convince themselves that the securities were satisfactory. 62 One of us has argued for a similar dynamic with rating-agency ratings. 63 The outcome of the "inquiry" was never in doubt.⁶⁴ In the case of ABACUS, Paulson was allegedly able to influence the selection of reference securities to include ones he thought were likely to default. The SEC's suit against Goldman was for failure to disclose Paulson's alleged role. 65 Information on Paulson, however, seems far less important than the information investors did have: the risk factors, the acknowledged possible conflict, and the fact that some other party (even if they did not know the party's identity or role in selecting the collateral) was making a sizeable bet that the collateral would decline in value.

We highlight the ABACUS transaction because of its prominence, but its cautionary disclosures do not stand out from those of other synthetic CDOs.⁶⁶ Another prominent example involves the hedge fund

^{62.} In some cases, rather than a foregone conclusion, the purchase may have been strongly presumed. The result of the inquiry would then have been in some doubt, but very little.

^{63.} See Clairc A. Hill, Why Did the Rating Agencies Do Such a Bad Job Rating Subprime Securities?, 71 U. PITT. L. REV. 585 (2010).

⁶⁴ Id

^{65.} SEC Complaint, supra note 45.

^{66.} Some evidence exists that at least one of the ABACUS buyers was an investor targeted as particularly willing to buy "bad" deals. See COHAN, supra note 1, at 541. Evidence also exists that targeting gullible investors may have happened on some other occasions. See FIN. CRISIS INQUIRY COMM'N, supra note 3, at 265; see also Dodona I, LLC v Goldman Sachs & Co., 847 F. Supp. 2d 624, 639 (S.D.N.Y. 2012). It may also be that in some deals, the investment banks may have spent time and effort "allaying" potential investors' concerns about investment quality. In Dodona, plaintiffs made allegations of this sort, as did plaintiffs in the Basis Yield case. See Dodona I, 847 F. Supp 2d. 624; Basis Yield Alpha Fund (Master) v. Goldman Sachs Grp., Inc., No. 652996 (N.Y. Sup. Ct. Oct. 18, 2012); see also Richman v. Goldman Sachs Grp., Inc., 868 F. Supp. 2d 261 (S.D.N.Y. 2012) (addressing allegations by shareholders of Goldman Sachs that Goldman failed to properly disclose its inappropriate business practices—the same types of practices plaintiffs alleged in the Dodona and Basis cases—and material misstatements and omissions in the sale and structuring of CDOs). It may be established in some cases that investors made their investments based on supplemental statements by bankers or statements by banks about their own "long" position aligned with that of the investors, statements that were materially misleading. Even in these cases, though, there was contrary disclosure in the offering memorandum about nonreliance on these statements and the need to conduct further due diligence that we would argue should have put these investors on notice to investigate further. In our view, many investment decisions were not made because of false or misleading dis-

Magnetar, which came under scrutiny for arranging synthetic CDOs that were in retrospect labeled "doomed to fail." 67 Magnetar helped originate twenty-eight subprime mezzanine CDOs from 2006 to summer 2007, many of them named after constellations. These CDOs averaged \$1.5 billion in size and at times constituted up to 70% of the CDO issuance market. 68 A Pulitzer-prize-winning team of reporters at ProPublica has alleged that Magnetar structured these CDOs to include particularly lowquality reference securities, just as Goldman had with ABACUS. While no civil or criminal charges have been brought in connection with the Magnetar deals, these CDOs performed particularly poorly. An analysis by ProPublica found that 96% of the Magnetar deals it identified were in default by 2008.⁶⁹ A review of the offering memoranda for subprime mezzanine CDOs structured and sold at the behest of Magnetar, such as Lacerta ABS CDO 2006-1, Ltd. and Squared CDO 2007-1, Ltd., show disclosure similar to that of the ABACUS deal, including risk factors as to selection, conflicts of interest, and the need to act upon independent information.⁷⁰

Another bank heavily involved in structuring and selling CDOs was Citigroup, which structured and sold Magnetar and many other CDOs. During 2007, Citigroup underwrote eighteen CDOs worth over \$20 billion, including \$6.5 billion worth of CDOs for Magnetar. The CDOs underwritten by Citigroup that collapsed spectacularly such as Octonion, 888 Tactical, Adams Square Funding II, and Class V Funding III contained disclosure similar to that of ABACUS and Timberwolf concerning the declining mortgage market, conflicts of interest, and the need to act

closure but rather, were made because investors bought without conducting sufficient due diligence. The one case to have gone to trial involving Class V Funding III disclosed substantial evidence in support of this view. See infra notes 85–88 and accompanying text. Indeed, it is scarcely surprising that the cases being litigated make the claim that defendants lied. If investors simply bought "bad" deals disclosed as such, they have no grounds to sue. And if a deal did well, they have no reason to sue, no matter what was or was not disclosed, or what influenced them to invest in the deal.

^{67.} See Josse Eisinger & Jake Bernstein, The Magnetar Trade: How One Hedge Fund Helped Keep the Bubble Going, PROPUBLICA (Apr. 9, 2010), http://www.propublica.org/article/themagnetar-trade-how-one-hedge-fund-helped-keep-the-housing-bubble-going.

^{68.} See Jake Bernstein et al., Timeline of Magnetar's Deals, PROPUBLICA (Apr. 9, 2010), http://www.propublica.org/special/the-timeline-of-magnetars-deals.

^{69.} See Eisenger & Bernstein, supra note 67; see also Steven M. Davidoff, If Little Else, Banker's Trial May Show Wall St. Foolishness, N.Y. TIMES DEALBOOK (July 17, 2012), http://dealbook.nytimes.com/2012/07/17/if-little-else-bankers-trial-may-show-wall-st-foolishness/.

^{70.} See Citigroup, Lacerta ABS CDO 2006-1 Ltd. Prospectus (Feb. 15, 2007), available at http://www.propublica.org/documents/item/lacerta-abs-cdo-2006-1-ltd.-prospectus; JPMorgan, Squared CDO 2007-1 Ltd. Prospectus (May 10, 2007), available at http://s3.documentcloud.org/documents/11872/squared-cdo-2007-1-ltd-prospectus.pdf.

^{71.} See Marian Wang, SEC Investigating Yet Another Magnetar CDO, PROPUBLICA (Scpt. 15, 2011), http://www.propublica.org/blog/item/sec-investigating-another-magnetar-cdo.

independently on the buyer's own information.⁷² Apparently, many market participants knew that Magnetar was behind the constellation deals.⁷³

Citigroup entered into a \$285 million SEC settlement in connection with Class V Funding III over its alleged failure to disclose that it had been instrumental in selecting the collateral for the instrument and also had shorted part of it. At the time of the settlement, Robert Khuzami stated that "[t]he securities laws demand that investors receive more care and candor than Citigroup provided. . . . Investors were not informed that Citigroup had decided to bet against them and had helped to choose the assets that would determine who won or lost." Yet a review of the offering memorandum shows it contains similar disclosure to other CDO offering memoranda about selection and conflicts of interest as well as disclaimers about the need for the buyer to independently assess the riskiness of the reference securities. Moreover, the marketing materials for the transaction stated that neither Citigroup nor Credit Suisse Alternative Capital (CSAC), the portfolio selection agent, was acting as an "advisor" or "agent" and that any buyer should make its investment decision

^{72.} Citigroup, Octonian I CDO, Ltd. Prospectus (Mar. 16, 2007), available at http://www.isc.ic/debt_documents/OctFinalProspectus._7647.pdf; Citigroup, 888 Tactical Fund Ltd. Prospectus (Mar. 20, 2007), available at http://www.isc.ic/debt_documents/Final%20888%20Tact ical_7074.pdf; Citigroup, Adams Square Funding II Ltd. Prospectus (Mar. 21, 2007), available at http://www.isc.ic/debt_documents/Adams21mar07_6039.pdf; Citigroup, Class V Funding III, Ltd. Prospectus, PROPUBLICA (Mar. 29, 2007), available at http://www.propublica.org/documents/item/class-v-funding-iii-prospectus [hereinafter Class V Funding III Prospectus].

^{73.} Class V Funding III Trial Transcript, supra note 35, at 221.

^{74.} See Jesse Eisinger & Jake Bernstein, Did Citi Get a Sweet Deal? Bank Claims SEC Settlement on One CDO Clears It on All Others, PROPUBLICA (Oct. 20, 2011), http://www.propublica.org/ article/did-citi-get-a-sweet-deal-banks-says-sec-settlement-on-one-cdo-clears-it-on. Citigroup and the SEC settled for \$285 million; Judge Rakoff rejected the settlement, but the SEC and Citi appealed, and the Second Circuit stayed his rejection, indicating that it supported the SEC practice. Congressional hearings on the subject were held, with most commentators supporting the SEC practice on the rationale that without it, no settlements would be made. See Claire A. Hill & Richard Painter, Why SEC Settlements Should Hold Senior Executives Liable, N.Y. TIMES DEALBOOK (May http://dealbook.nytimes.com/2012/05/29/why-s-e-c-settlements-should-hold-seniorexecutives-liable/. On Feb. 1, 2013, the Second Circuit heard arguments from the SEC and from Citigroup's lawyers that Judge Rakoff exceeded his authority in rejecting the settlement. See Peter Lattman, Court Hears Arguments on Judge's Rejection of S.E.C.-Citigroup Deal, N.Y. TIMES (Fcb. http://dcalbook.nytimes.com/2013/02/08/appeals-court-hears-arguments-over-judgerakoffs-rejection-of-citigroup-settlement/. For further discussion of the issues of board oversight the settlement raises, see generally Claire A. Hill & Brett H. McDonnell, Reconsidering Board Oversight Duties after the Financial Crisis, 2013 U. ILL. L. REV. (forthcoming 2013).

^{75.} Edward Wyatt, Citigroup to Pay Millions to Close Fraud Complaint, N.Y. TIMES, Oct. 20, 2011, at A1.

^{76.} Class V Funding III Prospectus, supra note 72, at vii, 42–48.

"without reliance" on either. 77 Class V Funding III's offering memorandum stated that

[a]Ithough the Manager [CSAC] or its affiliates or its clients may at times be a holder of Notes, its interests and incentives may not be completely aligned with the interests of the other holders of the Notes. . . . The ownership of Income Notes by it and its affiliates may give the Manager an incentive to take actions that vary from the interests of the holders of the Secured Notes. ⁷⁸

The memorandum further stated that not only could Citigroup and CSAC have conflicts, but that "[a] CDS Asset Counterparty's actions may be inconsistent with or adverse to the interests of the Noteholders." It went on to further state that

[i]n taking any action with respect to a CDS Asset (including declaring or exercising its remedies in respect of a credit event or any other default under or termination of the CDS Asset), a CDS Asset Counterparty may take such actions as it determines to be in its own commercial interests and not as agent, fiduciary or in any other capacity on behalf of the Issuer or the holders of the Notes.⁸⁰

As for the short positions Citigroup took, the offering memo stated that

Citigroup or an Affiliate thereof is expected to act as an initial CDS Asset counterparty pursuant to certain CDS Assets acquired by the issuer on the Closing Date. . . . In such capacity as swap counterparty, Citigroup (or such affiliate) may be expected to have interests that are adverse to the holders of Securities. 81

There were ten buyers of Class V Funding III, including the most sophisticated of investors: Ambac, the bond insurer; Bear Stearns Asset Management, one of the major buyers in this market; and Koch Global Capital, an asset manager for the billionaire Koch brothers. These buyers were provided with this disclosure and apparently were not dissuaded by what they read. In addition, evidence exists that only minimal due diligence was performed on the mortgages serving as collateral. 82 For exam-

^{77.} CLASS V FUNDING III, LTD., PITCH BOOK 2 (2007).

^{78.} Class V Funding III Prospectus, supra note 72, at 45.

^{79.} Id. at 27.

^{80.} Id.

^{81.} CLASS V FUNDING III, LTD., supra note 77, at 35.

^{82.} Class V Funding III Trial Transcript, *supra* note 35, at 428–29 (testimony of Sohail Khan, Citigroup salesperson for Class V Funding III) (testifying that investors did not look at individual securities, they were investing based on a macroeconomic views of the housing market); *id.* at 1260–

ple, David Salz, the manager at Ambac who was responsible for the Class V Funding III investment, testified at trial that the firm relied on summary information for its diligence and did not look at the actual mortgages underlying the CDOs, instead relying on the portfolio selection manager's due diligence. 83 This was something that the offering memorandum expressly warned against. 84

Evidence that our argument is not just hindsight bias—that someone other than the institution making the short bet thought at the time that the short bet was the right one to make—includes an email from an "experienced CDO trader," who "characterized the Class V III portfolio as 'dogsh!t" and "possibly the best short EVER!"; another experienced collateral manager commented that "the portfolio is horrible." The Class V Funding III CDO referenced constellation CDOs sponsored by Magnetar. It also referenced "president" CDOs underwritten by Morgan Stanley, a class of CDOs named mostly after ex-presidents. Many market participants were seeking to short constellation and president CDOs because they thought the reference collateral was poor. Reference and sold.

The SEC complaint named both Citigroup and an individual Citigroup employee, Brian Stoker. While Citigroup agreed to settle this matter, the employee refused to do so and was charged by the SEC with violations of section 17 of the Exchange Act.⁸⁷ At a civil trial held in July 2012, Mr. Stoker argued vociferously that there was sufficient disclosure made for the Class V Funding III transaction. He further argued that the buyers were sophisticated enough to make further inquiry before investing and had been warned to do so. A civil jury acquitted Mr. Stoker.⁸⁸

A federal district court similarly rejected a claim by the hedge funds Epirus Capital Management, LLC and Dodona I, LLC against Citigroup

^{62 (}testimony of David Salz) (testifying that Class V Funding III investor Ambac only looked at summary information and not the actual mortgages underlying the CDO).

^{83.} Class V Funding III Trial Transcript, *supra* note 35, at 1249 ("We did a reasoned due diligence. We understood the collateral—we actually understood that we didn't have the capacity to fully evaluate the collateral. And we depended on a manager and, therefore, we did a lot of due diligence on the manager.").

^{84.} Class V Funding III Prospectus, supra note 72, at vii, 42–48.

^{85.} Litigation Release, Sec. & Exch. Comm'n, Citigroup to Pay \$285 Million to Settle SEC Charges for Misleading Investors About CDO Company Profited from Proprietary Short Position Former Citigroup Employee Sued for His Role in Transaction (Oct. 19, 2011), available at http://www.sec.gov/litigation/litreleases/2011/lr22134.

^{86.} See Class V Funding III Trial Transcript, supra note 35, at 455.

^{87.} See Litigation Release, Sec. & Exch. Comm'n, supra note 85.

^{88.} See Peter Lattman, Former Citigroup Manager Cleared in Mortgage Securities Case, N.Y. TIMES DEALBOOK (July 31, 2012), http://dealbook.nytimes.com/2012/07/31/former-citigroup-manager-cleared-in-mortgage-securities-case/.

related to its underwriting of the Octonion CDO. The hedge funds alleged that Citigroup had influenced the Octonion selection agent to place other CDOs underwritten by Citigroup that it could not sell. The court carefully reviewed the offering memorandum and noted that it disclosed that the Octonion CDO might contain other CDOs underwritten by Citigroup and that investors were adequately put on notice to make their own risk assessment.⁸⁹

These cases arose out of CDOs marketed and sold in the months preceding the financial crisis. But a review of many of the documents from the library of over a hundred CDO offering memos assembled and made publicly available by the Financial Crisis Inquiry Commission finds similar disclosure in 2004 and 2005. For example, Goldman's offering memorandum for ABACUS 2005-1 contains language on conflicts of interest, requirements for due diligence, and other extensive risk factors similar to that contained in the offering memo for Abacus 2007-1. In general, while the precise language changes from transaction to transaction, the fundamental risk-factor disclosure is present in almost all of the CDOs from 2004 through 2007.

We pause here to anticipate a few possible objections to our arguments. Why not simply conclude that the securities are too complex to evaluate correctly? Due diligence on CDOs is very difficult; it is even more difficult on synthetic CDOs. CDOs are comprised of other securities, RMBS. Those securities are comprised of actual mortgages. Synthetic CDOs also referenced interests in other CDOs. The complexity is not masked, though. Investors are not led to believe they understand when they do not. If investors buy securities with complex disclosures merely because reputable parties are involved, then surely disclosure is not serving much of a purpose. Why not dispense with the disclosure and just keep information about who is involved? In any event, what the dis-

^{89.} Epirius Capital Mgmt., L.L.C. v. Citigroup, Inc., No. 09 Civ. 2594(SHS), 2010 WL 1779348 (S.D.N.Y. 2010), Dodona is faring better against Goldman Sachs. See supra notes 39-41.

^{90.} The prospectuses we reviewed were those publicly disclosed by the Financial Crisis Inquiry Commission and are available at CDO Library: Financial Crisis Inquiry Commission, STANFORD UNIV. ROCK CTR. FOR CORP. GOVERNANCE, http://fcic.law.stanford.edu/resource/staff-data-projects/cdo-Library (last visited Feb. 18, 2013).

^{91.} See Goldman Sachs & Co., Abacus 2005-1, Ltd. Offering Memo (Mar. 7, 2005), available at http://fcic-static.law.stanford.edu/cdn_media/fcic-docs/2005-03-00_Abacus%202005-1_CDO%20 Offering%20Circular.pdf. Following a common Wall Street practice, Goldman Sachs issued a number of CDOs named ABACUS based upon the same synthetic structure. Each deal had a number based on the year in which it was issued. The notorious ABACUS deal was quite different from the others. The ABACUS "platform" was "borrowed," said transaction participants. See COHAN, supra note 1.

closure cautioned against is what caused the securities to decline in value, unrelated to the securities' complexity.

Another argument against our position is that our evidence that disclosure should have put buyers on notice—phrases noting that a party "may" have a conflict—is in fact evidence that the disclosure was misleading where "may" really meant "do." We acknowledge that "do" sounds worse than "may." And we take no position on how the law should resolve this matter. But we think that an investor is chargeable with understanding that "may" includes "do." If someone says they "may" be doing something, one can scarcely be surprised that they actually are doing it. That the disclosure said "may" because the seller and his lawyers concluded that "do" would sound worse seems likely, but again, surely a reader of this disclosure understands full well that one typical tactic in disclosure documents is to say alarming things in a manner that does not sound alarming.

Another argument is that CDO investors might reasonably assume that the quality of the mortgages was established by those securitizing the mortgages into mortgage-backed securities. However, appropriate diligence was not done on the underlying RMBS either. Even if it was reasonable for CDO investors to rely on RMBS structuring, which we think is not the case, we still have a class of investors who did not do their due diligence: the RMBS investors. Moreover, large-scale securitization of subprime mortgages was relatively new, and obvious reasons existed for anyone involved in the origination and sale of those mortgages and the structuring of mortgage-backed securities to depict the mortgages as being of high quality. In the years when the housing bubble started to inflate, lack of experience with subprime securities should have led to wariness. 92

Another objection to our arguments is that the securities were presented as being vouched for by reputable intermediaries: the banks that were doing the selling, the reputable portfolio selection agents, and the ratings agencies. One quick response is that the offering memoranda in these deals are quite long: many of the memoranda are approximately 200 pages long, with considerable detail about the deal. If all they are relying on is the name of the bank, the name and some information about the reputation and credentials of the selection agent, and the rating, what is the rest of the disclosure doing? This answer is admittedly too quick: relying on reputation surely makes some sense. But the extent of reliance

^{92.} The offering memoranda for synthetic CDOs contained risk-factor disclosure on their novelty. See ABACUS Offering Memo 2007, supra note 43, at 25, 34.

in the face of the disclaimers about conflicts, and the recent history of spectacularly bad performance by rating agencies, is, we think, excessive. Perhaps the strongest argument against our claim that investors were not doing "enough" due diligence relates to the portfolio manager. Certainly, the ABACUS pitchbook might seem to invite this reliance, with its use of the manager's logo as well as that of the bank, Goldman Sachs, and the long description of the manager's credentials and investment record. But the offering memorandum, the far more "legal" document, details the manager's possible conflicts, as well as a multitude of conflicts by many other parties, including Goldman Sachs itself. It clearly instructs the investors to do their own due diligence and not rely upon the portfolio manager, identifying the securities in which the investors were effectively investing, as well as telling them that both Goldman and ACA might have nonpublic information about the securities that they were not disclosing.⁹³

While our thesis is not amenable to empirical proof, we think there is enough "smoke" to hypothesize the existence of a fire. We have considerable anecdotal evidence, as well as sworn testimony, supporting our depiction of sophisticated investors as sometimes being overeager or insufficiently critical. The SEC recently entered into a \$6.5 million settlement with Wells Fargo. The allegations, which Wells Fargo did not admit or deny, as is customary, included a statement that "Wells Fargo and its registered representatives did not review the private placement memoranda (PPMs) for the investments and the extensive risk disclosures in those documents. Instead, they relied almost exclusively on the credit ratings of these products despite various warnings against such overreliance in the PPM and elsewhere."

A final objection to our argument is that many of our examples involve deals in which claims of false and misleading disclosure have been made, yet our account minimizes the role of false and misleading disclosure. We use these examples because, not surprisingly, more information about them is available. But we have reviewed disclosures for deals that

^{93.} Id. at 25, 32-34.

As the occurrence of a Credit Event may result in a permanent decrease in the amounts payable in respect of the Notes, investors should review the list of Reference Obligations set forth herein and conduct their own investigation and analysis with respect to the creditworthiness of each Reference Obligation and the likelihood of the occurrence of a Credit Event with respect to each Reference Entity and Reference Obligation.

Id. at 25.

^{94.} Press Release, Sec. & Exch. Comm'n, SEC Charges Wells Fargo for Selling Complex Investments Without Disclosing Risks (Aug. 14, 2012), available at http://www.sec.gov/news/press/2012/2012-155.htm.

have not been challenged. Moreover, recall the Internet bubble. Disclosures that the issuer of securities being sold had no assets, revenues, or prospects were unambiguous, yet many investors, enough to fuel a considerable bubble, still bought the securities.

C. Executive Compensation

Executive compensation provides another example of disclosure not working as intended. The financial crisis showed that even sophisticated investors may not heed disclosure; the history of executive compensation disclosure suggests that heeding disclosure does not work as intended and, indeed, sometimes can have unintended negative effects.

For the past sixty years, as popular discontent has raged at "excessive" executive compensation, the SEC has pushed for enhanced disclosure of executive compensation. In 1938, the SEC first enacted executive compensation disclosure requirements. The first requirement for tabular disclosure was implemented in 1942.95 The SEC began requiring full tabular disclosure in 1992. In August 2006, the SEC began requiring more tabular disclosure of prerequisites, as well as more narrative disclosure of prerequisites and other additional compensation information.⁹⁶ Most recently, the Dodd-Frank Act added more disclosure requirements, including the requirement that each company disclose the relationship between the CEO's pay and the median pay of their employees. The Dodd-Frank Act adopted the SEC's proposal to require companies to hold nonbinding shareholder votes on pay, so-called "say on pay." It also requires companies to disclose to what extent they have taken the shareholder vote into account in their compensation decisions. 97 When making its compensation disclosure changes, including those in 1992 and 2006, the SEC gave the traditional rationale for disclosure: that boards and shareholders would make better decisions with better information.⁹⁸ The SEC also probably believed that companies would change problematic practices rather than disclose them, and that for problematic practices not changed, disclosure could trigger shareholder outrage and consequent

^{95.} See Amended Proxy Rules, Exchange Act Release No. 1823, 3 Fed. Reg. 1991-02 (Aug. 13, 1938) (adopting executive compensation rules for proxy statements); Exchange Act Release No. 3347, 7 Fed. Reg. 10,653 (Dec. 18, 1942) (adopting tabular disclosure).

^{96.} See Executive Compensation Disclosure, Securities Act Release No. 6962, 57 Fed. Reg. 48,126 (Oct. 16, 1992); Executive Compensation Release 2006, supra note 20, at 53,159-60.

^{97.} Dodd-Frank Act, Pub. L. No. 111-203, § 951, 124 Stat. 1376, 1899 (2010) (codified at 15 U.S.C. § 78n-1 (2011)).

^{98.} Executive Compensation Release 2006, *supra* note 20, at 53,159–60; *see also* Executive Compensation Disclosure, *supra* note 97 (discussing the rationale for the 1992 changes).

action. Extensive disclosure about compensation is thus required, and readily available.⁹⁹

But its effect has, it seems, not been to rein in executive pay. Indeed, some evidence, and intuition, supports the possibility that disclosure may have had the opposite effect. Those who care about the disclosure the most may be CEOs and other executives. They can use fuller access to the details about compensation of their peers in negotiations to ratchet up their pay. Like the residents of Lake Wobegon, where the children are all above average, an executive can argue that he or she is surely above average, and thus deserves above-average pay. Disclosure itself may have helped empower executives to demand higher pay packages, helping to push compensation up. 101

The spiraling compensation numbers are well known. ¹⁰² In 1965, the average ratio of total direct compensation for a CEO to the average production worker was 20.1 to 1, a figure that stood at 193.1 to 1 in the depths of the financial crisis in 2009. ¹⁰³ From 1980 through 2003, CEO pay increased six-fold. ¹⁰⁴ The average pay of a CEO of a Fortune 500

^{99.} Disclosure and analyses of compensation are mainstays of corporate governance websites. One site with a quite critical perspective is Footnoted.com, which highlights pay packages that are noteworthy either for their amounts or for other reasons such as perks. Every year, the website has a worst-footnote-of-the-year contest highlighting egregious executive compensation. This past year's winner was Hewlett-Packard for the \$36 million severance package it gave its former CEO Léo Apotheker for only eleven months on the job. See Michelle Leder, And the Winner of the Worst Footnote of 2011 is . . . , FOOTNOTED (Dec. 30, 2011), http://www.footnoted.com/my-big-fat-deal/and-the-winner-of-the-worst-footnote-of-2011-is/.

^{100.} Indeed, a recent paper argues that the mechanism by which executive pay is determined—the firm decides to pay the executive in the top x% (for instance, 30%) of the pay in peer companies—is the mechanism by which executive pay has become excessive. See Craig Ferrer & Charles Elson, Superstars, Peer Groups and Over-Compensation—Cause, Effect and Solution (Aug. 7, 2012) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.efm?abstract_id=2125979.

^{101.} See Kenneth R. Davis, Taking Stock—Salary And Options Too: The Looting Of Corporate America, 69 MD. L. REV. 419, 445, 447 (2010) ("After three years, the current framework has failed to bring executive compensation under control, even during the worst financial crisis since the Great Depression. . . . Ironically, the disclosures tend to increase executive compensation. Inflated executive egos demand inflated executive pay, especially when benchmarked to the compensation of rival executives. The CD&A encourages a 'my-daddy-makes-more-than-your-daddy' mentality between peer companies.").

^{102.} See generally Carola Frydman & Dirk Jenter, CEO Compensation, 2 ANN. REV. FIN. ECON. 75 (2010) (documenting an inflation adjusted rise in CEO pay at S&P 500 firms from a median of \$2.3 million in 1992 to \$6.1 million in 2008); Carola Frydman & Raven Saks, Executive Compensation: A New View from a Long-Run Perspective, 1936-2005, 23 REV. FIN. STUD. 2099 (2010) (documenting that CEO pay began to increase rapidly in the 1980s).

^{103.} Econ. Pol'y Inst., CEO Compensation and CEO-to-Worker Compensation Ratio, 1965–2011, STATE OF WORKING AMERICA (June 18, 2012), http://stateofworkingamerica.org/chart/swa-wages-table-4-43-ceo-compensation-ceo/.

^{104.} See Xavier Gabaix & Augustin Landier, Why Has CEO Pay Increased So Much?, 123 Q. J. ECON 49 (2008); see also Executive Compensation Release 2006, supra note 20, at 53,159; Frydman & Jenter, supra note 106; Frydman & Saks, supra note 103.

company is now \$12.1 million. 105 As one author observes, "[i]t is interesting to note that in the years after the SEC's 1992 executive compensation disclosure rules, compensation among U.S. CEOs began a period of fantastic growth. This experience was similar to the result in Canada, which adopted executive compensation disclosure rules earlier." 106 Of course, we cannot know whether but for the more extensive disclosures compensation would not have increased further. Nevertheless, there seems to be at least suggestive evidence that executives' peers cared more about, and made more use of, the incremental information in the compensation disclosures than did forces that might have worked to limit executive pay.

In contrast to pure disclosure, the recent introduction of shareholder votes on pay may be having more of an impact. As companies need to present their compensation packages for shareholder vote, they appear to be thinking about what they can justify and, by some accounts, modifying (that is, moderating) compensation accordingly. Say on pay is sufficiently recent, and there are enough other reasons why compensation might be moderating, such as the financial crisis and its continuing effects on the economy, that any assessment of say on pay's effects is necessarily preliminary and tentative. It may be that say on pay has an effect in particularly salient circumstances, but in the vast majority of cases, it simply validates preexisting compensation. Indeed, the vast majority of S&P 500 companies in the United States, 97%, earn positive votes. 108

^{105.} See Pat Garofolo, Average Fortune 500 CEO Now Paid 380 Times as Much as the Average Worker, THINK PROGRESS ECON. (Apr. 19, 2012, 1:00PM), http://thinkprogress.org/economy/2012/04/19/467516/eco-pay-gap-2011/?mobile=nc.

^{106.} Roger Coffin, A Responsibility To Speak: Citizens United, Corporate Governance And Managing Risks, 8 HASTINGS BUS. L. J. 103, 117 n.61 (2012); see also Kathryn J. Kennedy, Excessive Executive Compensation: Prior Federal Attempts To Curb Perceived Abuses, 10 HOUS. BUS. & TAX L. J. 196, 238 n.229 (2010) ("A January 2007 study showed that 70% of companies thought the 2006 requirements would have a 'minor at best' impact on company compensation programs. . . . Regarding the changes being made or considered as a result of the new disclosure requirements, only 28% of companies were 'considering or [had] made changes' to equity grant practices and 5% were 'considering or [had] made changes' to their performance measures." (alterations in original) (internal citations omitted)).

^{107.} See Steven Balsam & Jennifer Yin, The Impact of Say on Pay on Executive Compensation (Mar. 19, 2012) (working paper), available at http://papers.ssrn.com/sol3/papers.cfm?ab stract_id=2026121; see also Gretchen Morgenson, When Shareholders Make Their Voices Heard, N.Y. TIMES (Apr. 8, 2008), http://www.nytimes.com/2012/04/08/business/say-on-pay-votes-make-more-shareholder-voices-heard.html; Europe's Shareholder Spring: Shareholder Discontent with Executive Remuneration, GMIRATINGS, http://info.gmiratings.com/curopes-shareholder-spring-shareholder-discontent-with-executive-remuneration (last visited Feb. 18, 2013) (discussing the trend toward protest votes against pay in European say on pay votes).

^{108.} For the 2012 proxy season and as of July 16, 2012, 97% of S&P 500 companies reported receiving shareholder approval under their say on pay votes. See Say on Pay Review of 2012 Proxy Season Results, SULLIVAN & CROMWELL LLP (July 17, 2012), http://www.sullcrom.com/files/Public

Still, the debate about the efficacy of say on pay remains open, a debate to be resolved as we see how companies and shareholders respond in future years. 109

If say on pay is having an effect, perhaps part of that effect is attributable to the new disclosure requirements enacted as part of the say on pay regime under the Dodd-Frank Act. For instance, perhaps the new rule requiring companies to explain to what extent they take into account the shareholder vote may be having an effect. But the expansive disclosure available before the Dodd-Frank Act by itself apparently did not do what it was supposed to do, and as we argued above, may have made matters worse by motivating peer CEOs to seek higher compensation from their boards and arming them with a powerful argument to do so The bottom line is that the effects of disclosure are more complicated than the classic rationale for disclosure suggests.

III. BEHIND THE CRITICISM

In the preceding Part, we discussed two examples: disclosure about synthetic CDOs and executive compensation. With CDOs, disclosure should have heralded caution, especially during the years immediately preceding the crisis. Of course, we cannot assess what investors would have done without the disclosures they received. Perhaps they would have bought even more of the securities, but this seems unlikely. The picture consistently painted is one in which some investors were buying as quickly as they could, without negotiating for much, if any, lemons

ation/c294c919-4351-4d6c-a6d1-06914f0f36d6/Presentation/PublicationAttachment/d4a5c6b3-1140-4cb7-8942-d3dc71655a67/Say-on-Pay_Review_of_2012_Proxy_Scason_Results_7-20-2012.pdf.

^{109.} See Steven M. Davidoff, Efforts to Rein in Executive Pay Meet with Little Success, N.Y. TIMES, July 12, 2011; Steven M. Davidoff, Humanitarian Effort in Congo Puts S.E.C. in Unintended Role, N.Y. TIMES, Aug. 28, 2012; see also Minor Myers, The Perils of Shareholder Voting on Executive Compensation, 36 Del. J. Corp. L. 417 (2011).

Shareholder voting on executive compensation, however, could hurt shareholders in ways supporters of the reform have overlooked. Once shareholders have approved a firm's compensation arrangements, directors will no longer bear complete responsibility for them. If any negative attention — any outrage — is directed at the firm's pay practices in the future, directors can escape a portion of the blame that otherwise would have been theirs alone. This diffusion of responsibility will partially insulate directors' reputations from future outrage, and because directors will no longer bear all of the future costs of taking risks in the CEO's favor, they may end up taking more of those risks.

Myers, supra, at 418.

^{110.} There is one way to completely salvage executive compensation disclosure: to say that the compensation really was appropriate, so that its disclosure naturally did not clicit any change. We will not address the intricacies of the debate here, but suffice it to say that we reject this view, instead being favorably disposed to the views of commentators who think something other than pure market forces is setting executive pay. See, e.g., LUCIAN BEBCHUCK & JESSE FRIED, PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION (2004).

discount to reflect quality issues or uncertainty, and transactions were being churned out to meet demand. With compensation disclosure, we also cannot run a perfect experiment. But evidence also suggests that rather than having the intended effect, disclosure may have had an unintended negative effect. These examples demonstrate that there are important instances in which disclosure did not work as intended. This Part addresses why this would be so.

Disclosure's limits have been much discussed in the literature, especially given the behavioral turn in legal scholarship. 112 Many of the standard critiques consider that disclosure can be difficult to understand and therefore prescribe more "plain language" or more financial literacy education. 113 Some critiques emphasize how few people read disclosure documents. Some argue that disclosure is insufficient and that it omits important information. Some emphasize divergences of interests between those doing the disclosing, lawyers helping their clients avoid liability. and investors wanting information. These critiques may acknowledge issues regarding processing of information, but they view and treat these issues as defects or mistakes that idealized disclosure (and, to some, better education) could in theory remedy. Most of the critiques implicitly accept that better disclosure should lead to better decisions and have straightforward ideas as to where disclosure falls short. One type of critique argues that the problem is too much disclosure—that is, information overload.¹¹⁴ Even critiques focusing on information overload implicitly assume that better disclosure would make for better decisions. It is just that better disclosure would be shorter.

The critiques in the literature mostly focus on difficulties experienced by retail investors. We do not know how much to hope that retail investors could ultimately make better investing decisions.¹¹⁵ We are

^{111.} See generally Claire A. Hill, Why Didn't Subprime Investors Demand (Much More of) a Lemons Premium?, 74 LAW & CONTEMP. PROB.101 (2011).

^{112.} The scholarship typically addresses the question of why investors would make bad investment decisions; it does not address broader conceptual failures in disclosure that more broadly indict the underlying rationale.

^{113.} See Improving Financial Disclosure for Individual Investors: Hearing Before the S. Comm. on Banking Hous., and Urban Affairs, 109th Cong. 40 (2006) (statement of Christopher Cox, Chairman, Sec. & Exch. Comm'n), available at http://www.sec.gov/news/testimony/ts042506cc.htm. For a discussion of the promotion of financial literacy and arguments against it because of the inherent failure of such education to work, see Lauren E. Willis, Against Financial-Literacy Education, 94 IOWA L. REV. 197 (2008).

^{114.} See generally Ben-Shahar & Schneider, supra note 4.

^{115.} Our skepticism is informed by experiences with mandatory disclosure in other areas. See Kesten C. Green & J. Scott Armstrong, Evidence on the Effects of Mandatory Disclaimers in Advertising With Reply to Commentators: Should We Put a Price on Free Speech?, J. PUB. POL'Y &

skeptical that there is an appreciable increment of improvement that could readily and straightforwardly be captured. For instance, if we knew how to improve financial literacy effectively, then presumably we would be making more efforts to this end. The line of scholarship is largely orthogonal to our concern in this Article, which is with sophisticated investors. The regulatory system, and the broader worldview underlying the system, is not conceptually troubled by the existence of some retail investors who might be a bit naïve or credulous. Sophisticated investors are another matter. Our system is built on taking seriously that sophisticated investors are, well, sophisticated—disclosure directed to them hits its mark. 116 At the extremes, standard theory only requires one investor to get it right; an arbitrageur. The arbitrageur can spot pricing mistakes and exploit them. But the arbitrageur in this account has to have access to extremely large quantities of money and be willing to use it to exploit the mispricing. The less smart money there is, the less an arbitrageur will be willing or able to acquire money to effectuate his strategy. Making money, after all, requires others to eventually recognize what the arbitrageur first saw. So, theory effectively requires some appreciable quantity of smart money. 117

We do not disagree with the observations made in the literature that some sophisticated investors did not understand the securities. (Of course, some sophisticated investors did understand the securities, and some used their understanding to make a great deal of money.) But we think much less can and should be made of this lack of comprehension than is typically made. The big question to be answered is this: Why did sophisticated investors buy something they knew or should have known they had not understood sufficiently? While it seems possible that some buyers may have thought they had sufficiently valued and understood these CDOs, many did not investigate nearly as much as the disclosures would seem to have warranted. Although hindsight bias may influence this assessment, its influence is limited: our best attempt at an ex ante assessment also suggests that investor inquiry was deficient.

The disclosures the investors were given may not have been—indeed were not—perfect. But they were good enough to put investors on notice. Certainly, the disclosures did not hide the instruments' complexi-

MARKETING (forthcoming 2013) (finding no evidence that consumers benefit from mandated disclosure in advertisements).

^{116.} See Louis Lowenstein, Efficient Market Theory: Let the Punishment Fit the Crime, 51 WASH. & LEE L. REV. 925, 926 (1994).

^{117.} Eugene Fama, The Behavior of Stock Market Prices, 38 J. BUS. 34 (1965); Sanford J. Grossman, On the Efficiency of Competitive Stock Markets Where Trades Have Diverse Information, 31 J. FIN. 573 (1976).

ty or, more importantly for our purposes, the conflict of interest of the seller. ¹¹⁸ In this regard, while many of the risk factors were boilerplate, many were not. Boilerplate risk factors can easily be discounted or disregarded, whether rightly or not, because the reader may believe their inclusion reflects an excess of caution by lawyers. ¹¹⁹ But many of the risk factors at issue were specific to these sorts of transactions and put investors on notice to investigate thoroughly. ¹²⁰ There were apparently also negotiations over risk factors, and investors got documents marked to show changes from previous iterations; investors were apparently aware of the risk factors and would have had their attention drawn to the ways in which they changed. ¹²¹ Moreover, if there were many material mis-

^{118.} The disclosures of risk factors were searcely abbreviated. They detailed everything that could go wrong. That being said, even those writing the risk disclosures considered most of the events exceedingly unlikely, and may even have made their own bets against the events' occurrence. We do not want to argue that people should have been able to see the future; we are quite mindful of the possibility of hindsight bias. It seems fair to say that especially in the years preceding the crisis, people in the markets were on notice and perhaps even generally aware of red flags but charged ahead in significant part because others were doing so. A telling exchange from the trial of Brian Stoker over the Class V Funding III CDO is illustrative. Mr. Stoker's counsel is cross-examining David Salz, the manager who made the determination to invest in Class V Funding on behalf of Ambac. Mr. Salz was asked about the disclosure in the offering memo when this exchange occurred:

Q. And could we turn to page 44. In the last full paragraph down at the bottom, highlight that. Did you notice in there that it said Citigroup or an affiliate thereof is expected to act as initial CDS asset counterparty, blah, blah, blah, and at the bottom it says, as such, a swap counterparty Citigroup will have no duty to act on behalf of the note holders and directly or indirectly may act in ways adverse to them. Did you see that language?

A. Yes. It's boilerplate language.

Q. And would you look at page 84 of this other one. And in the first paragraph, twothirds of the way through the paragraph, did you see the language that says, the initial CDS counterparty may provide CDS assets as an intermediary with matching offsetting positions requested by the manager or may provide CDS assets alone without any offsetting positions. Did you see that?

A. I did see that, and that was standard language.

Class V Funding III Trial Transcript, *supra* note 35, at 1264–65. Ambac lost more than \$300 million investing in Class V Funding III. *See* Davidoff, *supra* note 69.

^{119.} Taken to its extreme, our reasoning would suggest that people need to be far warier than they are regarding "boilerplate" warnings. Indeed, an acontextual reading of boilerplate risk factors might seem to support the idea that people should not buy anything. Exploring this point further is beyond the scope of this Article; suffice it for present purposes to note that people need, and have, a strategy to proceed notwithstanding scary boilerplate on most, and maybe all, medicines, rides in amusement parks, participation in sports activities, and many other things. Is there a way to make disclosure less numbing? For instance, requiring the rotation of words or scary pictures to limit people's ability to be numbed? We are skeptical that there is a solution in these ordinary cases. But again, these sorts of techniques should not be necessary for professionals.

^{120.} This is particularly true for transactions in 2005 and later years. See supra notes 90-91 and accompanying text.

^{121.} This was the case in the Class V Funding III CDO. Ambac and other buyers were able to comment on and see revised disclosure, and Citigroup did modify the risk factor for its conflicts of

statements and omissions in the disclosure documents, this would, we think, have been revealed. Instead, the lack of lawsuits and accountability has been bemoaned. While there have been lawsuits, it is hard to conclude from either the volume of suits or their success that misleading disclosure was a significant part of what caused purchases of subprime securities. Buyers were eager to buy these types of securities without regard to specifics of a particular issuance. True, they were buying from reputational intermediaries, investment bankers. But they could scarcely have simply relied on their sellers to protect them. ¹²² Individual bankers might get rewarded for selling an instrument regardless of its quality. These banks were also known to be making a market, acting as a broker for a sale that had two competing sides, each of which had to be marketed

Can investors argue that the securities' high ratings obviated the need for a close look at disclosure?¹²⁴ Certainly, investors wasted no time in blaming the agencies and trumpeting their reliance. But did they rely on ratings? Would this reliance have been justifiable?¹²⁵ High ratings were clearly necessary to investors' investment decisions. In a sense, they relied because without the ratings, they would not have invested. Could the ratings have been sufficient? In other words, is our critique of disclosure misplaced because investors were justified in simply investing based on an AAA rating? We of course think not. Indeed, if ratings were sufficient, investors investing for others are wildly overpaid. These investors certainly tout their expertise, which one would think cannot simply consist of buying highly rated securities. Moreover, rating agencies have been colossally wrong from time to time and in very recent memory. Notorious recent examples where rating agencies grievously misrated include Enron, Worldcom, and Adelphia. Thus, a high rating

interests to uniquely fit this transaction. See Class V Funding III Trial Transcript, supra note 35, at 1335.

^{122.} See Davidoff et al., supra note 41.

^{123.} See Thompson, supra note 3; Andrew Tuch, Conflicted Gatekeepers: The Volcker Rule and Goldman Sachs (Harv. John M. Olin Ctr. for Law, Econ., Discussion Paper No. 37, 2011), available at http://ssrn.com/abstract=1809271.

^{124.} See Hill, supra note 115. Some have argued that the complexity of transactions at issue in the crisis "made" investors rely on rating-agency ratings. See Katz, supra note 4; see also Claire A. Hill, Why Did Anyone Listen to the Rating Agencies After Enron?, 4 Md. J. Bus & Tech. Law 283 (2009).

^{125.} In Hill's view, investors do "rely" on the agencies, but mostly for reputational cover. The dynamic is not unlike the dynamic that motivates buying the "hot new instrument" when one's peers are buying it. See Hill, supra note 128; Hill, supra note 115. Investors certainly had evidence that the subprime securities rated AAA were not equal in quality to AAA-rated U.S. Treasuries; the yield on the subprime securities was higher, which is precisely why the investors bought them rather than the Treasuries.

would not excuse investors from making their own assessments. Most investors buying the securities at issue were investing other people's money. They were selling their services as experienced and expert selectors of securities. These investors did not depict themselves to others and to themselves as almost automatically saying "yes" to securities they knew they did not understand. Surely, nobody would invest with a money manager who said in his marketing materials "I buy anything Goldman Sachs offers me that is rated AAA."

An explanation of why sophisticated investors bought subprime securities in the volumes and on the terms they did despite the disclosure made is beyond the scope of this Article. We think, however, that in the case of CDOs in the period before the financial crisis, herd behavior and the incentive for money managers to seek to do no worse than their peers played a large part in driving the market. 126 Once a money manager knows that his peers are buying an investment, his best strategy is to buy it too. 127 At the time of the financial crisis, the herd behavior was to make macro bets on the housing market through CDOs without thorough attention to detail. 128 Disclosure could still work as intended if those effectively leading the herd—those whose behavior was being copied—were strongly influenced by the disclosure. We think this is not what typically occurred. Again, we do not purport to advance an account of investor behavior in the crisis. Our claim is simply that for sophisticated investors' purchases of complex securities, including synthetic CDOs, disclosure mattered far less than we might want it to; improving disclosure therefore seems unlikely to make much of a difference.

Our second example was executive compensation disclosure. This disclosure, like the disclosure in offering documents for securities issued in the crisis, was supposed to inform and potentially stoke the ire of investors. Furthermore, it was supposed to constrain companies who would not want to disclose things that might embarrass them and stoke the ire of investors. The theory on which this would be so is obvious and intuitive. But the disclosure does not seem to have worked to constrain compensation. During a period when executive compensation disclosures

^{126.} On herd behavior generally, see, for example, David Scharfstein & Jeremy Stein, Herd Behavior and Investment, 80 AM. ECON. REV. 465 (1990); Kenneth A. Froot et al., Herd on the Street: Informational Inefficiencies in a Market with Short-Term Speculation, 47 J. FIN. 1461 (1992); Russ Wermers, Mutual Fund Herding and the Impact on Stock Prices, 59 J. FIN. 581 (1994); Chevalier & Ellison, supra note 13.

^{127.} See Claire A. Hill, Justification Norms Under Uncertainty: A Preliminary Inquiry, 17 CONN. INS. L.J. 27 (2010).

^{128.} Testimony given at Brian Stoker's trial confirms that many CDO purchasers were simply betting on the housing market. See Class V Funding III Trial Transcript, supra note 35, at 428–29.

were being expanded, compensation was increasing, at times quite dramatically. Even in companies whose stock had declined, shareholder reaction to a CEO's large compensation package was muted. The contrary expectation, that shareholders would feel outraged, fails to take into account the psychological realities of the situation. The difference between what the shareholders knew before the increased disclosure and what they knew afterward was not a meaningful increment to them. To a person who makes \$50,000, the difference between \$10 million and \$20 million may not be meaningful. The companies may have been counting on this. But certainly, to someone who has \$10 million or, for that matter, \$20 million, the difference is quite meaningful. The simple prediction as to how disclosure would work apparently proved incorrect.

IV. SOME THOUGHTS FOR THE FUTURE OF DISCLOSURE

Let us return to the rationale for disclosure in the first instance: sunlight is the best disinfectant. Why should it be? The answer lies in two deeply ingrained, commonsense assumptions: (1) that better information yields better decisions, and (2) that having to reveal potentially embarrassing conduct will constrain the conduct. These assumptions are not wholly false, but they are incomplete. All else equal, better information yields better decisions, but the effect can be and, in the case of subprime securities issued during the financial crisis, was, swamped by something else, probably at least in part "sophisticated" investors wishing to minimize their downside risk by copying their peers' investments. With executive compensation, the better disclosure did not inspire action by outraged shareholders or sufficiently restrain the company's managers, for the same reason. The managers correctly assessed that the shareholders would not find the incremental disclosure significant. The foregoing account reveals an important contrast between the paradigmatic mechanism by which disclosure works, which is largely individual, and the more social and contextual mechanism we hypothesize. To overstate the case a bit, the former contemplates that somebody reviews information provided to them and makes a substantive assessment based on that information; the latter contemplates that the review and assessment may only be one part of an endeavor that takes into account many other things relating to the broader social context. 129 Disclosure is importantly social. This has significant implications to be developed in future work.

^{129.} One reason why this may be an overstatement is that even the investor making an "individual" decision is doing so against a backdrop in which prices are set by the aggregate views of other market participants.

We provide examples of the limits of disclosure in the CDO market, but our observations have general applicability to disclosure for sophisticated investors in the securities market. Trying to take into account the complexities of how language works is difficult indeed. Consider warnings on the back of an aspirin bottle. If anyone took them seriously, would they take aspirin? Instead, we have a narrative that allows for cognitive dissonance: "that's just there because the lawyers have to include that," or "it may be true, but it's so unlikely," or "it surely won't happen to me." Further, lawyers know how to exploit these sorts of reactions by crafting risk factors that conjure up the possibilities of what might occur without doing so too viscerally. For example, they use the formulation "the seller may engage in conflicted behavior" rather than "the seller is engaging in conflicted behavior." When securities are marketed and sold, they are marketed more by reference to their upside possibilities than their downside ones. Lawyers arguably have a community of interest in having a common set of risk factors expressed in language that is technically accurate but manages to sound remote. 130 Can we understand enough about language to do better? What would constitute "better" in this situation? Would we want risk factors conjured up more viscerally? Does it matter given the enormous motivation to invest alongside one's peers? We have no good answers to these questions.

Our analysis suggests that improving disclosure would be quite difficult, and that even improved disclosure might not help very much. As for executive compensation disclosure, perhaps the apparent reaction could have been anticipated ex ante. But perhaps not. It is intuitively plausible that compensation disclosure might stoke shareholder outrage. And perhaps, now, it is doing so, in very modest measure. "Say on pay" no votes have doubled this year, although yes votes are still exceedingly high. Approval rates are now 97% of all S&P 500 companies rather than almost 99% in say on pay's first full year. Still, the increase is significant, as is the fact that well-known companies including Citigroup and Barclays have been among those getting votes that reflect significant shareholder disapproval of pay. In Citigroup's case, a majority voted against the pay; in Barclay's case, a majority voted in favor of the pay, but an appreciable minority voted against it. But Citigroup and Barclays have received terrible publicity for their bad conduct during and after the

^{130.} See SHUY, supra note 48.

^{131.} See Say on Pay Review of 2012 Proxy Season Results, supra note 112.

financial crisis. We may have the beginnings of a trend, but we may also simply have a reaction to extreme circumstances. 132

With say on pay came requirements for yet more disclosure on compensation. 133 But if say on pay is working to constrain compensation, it is probably not doing so through the additional disclosure: as we have argued above, there has been extensive disclosure for quite some time. The negative (or at least less positive) votes in Citigroup, Barclays, and other cases appear to be spurred by the coincidence of a number of unrelated factors, such as the financial crisis, the continuing economic downturn, and rage at financial institutions. The opportunity to express a view appears to be the driving force; the disclosure was arguably not even necessary. In other words, we think the compensation would have yielded the "no" vote even if far less had been disclosed about it. But the opportunity to express a view may have motivated a closer look at disclosure. Moreover, the availability of the disclosure combined with a straightforward way to respond to it may have motivated some investors to read it. Previous reactions might have been not just that the incremental information was not meaningful, but also that how to act on it was not clear. The lesson, again, is that in considering solutions, we cannot just rely on the assumption that people simply read and act on disclosure.

While our emphasis on disclosure's limits even for sophisticates and in other cases where the disclosure is sufficiently well understood is somewhat novel, we are in plentiful company in pointing to the general failings of disclosure. So why is there so much emphasis on disclosure? One author, discussing the issue in the context of executive compensation, articulates a view with which we agree. Indeed, we would apply the author's reasoning more broadly to contexts other than executive compensation:

For lawmakers, executive compensation reform operates as a blue pill—a mechanism for lawmaker diversion and responsibility-shifting that diverts corporate constituent and scholarly attention away from more important corporate governance and socio-economic issues. This scenario threatens the prospect of optimal re-

^{132.} See Jessica Silver-Greenberg & Nelson D. Schwartz, Citigroup's Chief Rebuffed on Pay by Shareholders, N.Y. TIMES DEALBOOK (Apr. 17, 2012), http://dealbook.nytimes.com/2012/04/17/citigroup-shareholders-reject-executive-pay-plan/; Barclays Stung by Shareholder Pay Revolt, BBC, (Apr. 27, 2012), http://www.bbc.co.uk/news/business-17860232; see also supra notes 109-10 and accompanying text.

^{133.} New disclosure requirements include disclosure concerning compensation committees, compensation consultants, golden parachutes, and a comparison of CEO pay to the median pay of the company's employees. Dodd-Frank Act, Pub. L. No. 111-203, §§ 951-954, 124 Stat. 1376, 1899-1905 (2010).

form.... The unobservable impact of executive compensation reform provides lawmakers with added discretion that is often used for incremental, moderate, or conservative corporate reforms, even in the face of crisis. On the other hand, sweeping reforms are unlikely because they pose a serious risk to political capital. Therefore, lawmaker cries for executive compensation reform should be approached with vigilance. ¹³⁴

Whenever there is a salient bad event, regulators will want to address it. They will want to seem to be "doing something." Disclosure seems responsive and is relatively politically palatable. It is palatable in prospect and in retrospect. An important reason why disclosure is entrenched as a solution is because we, as a society, like to think that if people are given the right information they will make the right decisions. As individuals, too, we like to think that if we are given the right information we will make the right decisions. 135 It is easier to blame someone who should have made more or better disclosure than someone, maybe one's self, who did not fully read and attend to it. Many attempts to blame defective disclosure seem to reflect these factors. Recall the ABACUS transaction discussed above, for which Goldman Sachs paid \$550 million to the SEC to settle allegations that it had not fully disclosed Paulson's role in selecting the securities. At the time the transaction was being arranged and sold, Paulson was not well known. His opinion that the mortgages on which ABACUS investors were betting were bad was not nearly as crucial a piece of information as it seems today, when Paulson was proved right and became famous for making \$4 billion in one year, 2007, on his bets that the mortgage market would collapse. 136 Moreover, the buyers of ABACUS knew that someone was making the bet Paulson was. Indeed, and critically, the disclosure stated that it might very well be Goldman Sachs itself, scarcely a slouch in the "savvy" department. The bet the investors thought was being made, one based on an ex post assessment of the securities' low quality, and perhaps by someone exceedingly savvy, was not materially different from the bet that was actually being made, based on an ex ante selection, where the person making the bet and possibly playing a part in the selec-

^{134.} Omari Scott Simmons, Taking the Blue Pill: The Imponderable Impact of Executive Compensation Reform, 62 SMU L. REV. 299, 299 (2009).

^{135.} This is an example of a much broader phenomenon, akin to the "just world" phenomenon. People seek a narrative that allows them to maintain their view that the world is just: "People lied to me-now the law has been changed so that they can't do it again." See generally Claire A. Hill, Rationality in an Unjust World: A Research Agenda, 35 QLJ 185 (2009).

^{136.} See Gregory Zuckerman, The Greatest Trade Ever: The Behind-the-Scenes Story of How John Paulson Defied Wall Street and Made Financial History (2009).

tion was at the time not only unproven but also, according to some accounts, not particularly well regarded. Indeed, one could argue that an ex ante selection by the unknown Paulson was far better than what the investors had signed up for: a selection, probably ex post, by Goldman itself.¹³⁷

We have no grand solutions to fix the problem. We do, however, have a few modest suggestions. We address first the problem revealed in some purchases of subprime securities. One of us has argued elsewhere for an "unsafe harbor" under which investors attempting to justify their investment decisions to a court could not invoke reliance on third-party certification as their sole or principal decisionmaking technique. This would ensure that sophisticated investors take some responsibility for their decisionmaking or lack thereof. Other mechanisms to amplify the critical voices also could be considered. We note in this regard recent work by Brett McDonnell and Dan Schwarcz on *Regulatory Contrarians* and Ross Levine and coauthors on *The Sentinel*. This work contemplates empowering someone within government to espouse contrary views or simply be independent. 139

The broader suggestion, applicable for both problems we discuss, is to encourage wariness at too-ready use of expensive disclosure requirements. Conflict mineral disclosure is a good example. We think these rules resulted from an infelicitous storm: general condemnation of use of monies from minerals mined in certain parts of the world to fund horrific armed conflict, desire to be seen as doing something, and a too-optimistic belief in the workings of disclosure. The release explaining the rules is 356 pages long. Compliance costs are in the billions of dollars. It's not at all clear how much, if at all, the rules will alleviate this problem. ¹⁴⁰ In any event, policymakers and commentators should be more

^{137.} One of us, Hill, is writing a book with Richard Painter arguing, in effect, that banks should not engage in transactions like ABACUS. The argument in this paper—that the disclosure documents put investors on sufficient notice—is orthogonal. In the world we inhabit, banks are allowed to have conflicts of interest with their clients, and their clients need to be wary indeed. The Hill and Painter book will argue that the behavior of bankers in engaging in such transactions, in "gaming" transactions, and in transactions involving a great deal of risk can and did harm society.

^{138.} Hill, supra note 115. Taken any distance, this type of reasoning might lead to serious and problematic diseconomies, as duplicative investigations were conducted by many investors. Meeting in the middle would be ideal here: allow some reliance on "experts," but require those who rely to have a good reason for their reliance. Courts would determine whether the reason was good enough. Another problem with this sort of solution could be to embolden those dealing with investors to behave badly if it allowed them to assert that the investors' reliance on them wasn't reasonable. The "unsafe harbor" would have to be carefully crafted to avoid that result.

^{139.} JAMES R. BARTH ET AL., GUARDIANS OF FINANCE: MAKING REGULATORS WORK FOR US (2012); Brett McDonneil & Daniel Schwarcz, Regulatory Contrarians, 89 N.C. L. Rev. 1629 (2011). 140. See Davidoff et al., supra note 41.

mindful of the limits of disclosure even for sophisticated investors. Disclosure continues to be emphasized far more than is warranted for many reasons, including too-strong beliefs in the commonsense assumptions noted above and a need to do "something" constrained by discomfort with heavy-handed regulation and paternalism. More research should be done beyond the now-voluminous work explaining lack of understanding or lack of incentive to read disclosure; as the crisis has shown, we urgently need to understand how people, including supposed experts, take in and act on information.