Limits of Disclosure

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Abstract

Disclosure has its limits. One big focus of attention, criticism, and proposals for reform in the aftermath of the 2008 financial crisis has been securities disclosure. But most of the criticisms of disclosure relate to retail investors. The securities at issue in the crisis were mostly sold to sophisticated institutions. Whatever retail investors’ shortcomings may be, we would expect sophisticated investors to make well-informed investment decisions. But many sophisticated investors appear to have made investment decisions without making much use of the disclosure.

We discuss another example where disclosure did not work as intended: executive compensation. The theory behind more expansive executive compensation disclosures was that shareholders might react to the disclosures with outrage and action, and companies, anticipating shareholder reaction, would curtail their compensation pre-emptively. But it was apparently not the reality and instead compensation spiraled higher.

The two examples, taken together, serve to elucidate our broader point: underlying the rationale for disclosure are common sense views about how people make decisions—views that turn out to be importantly incomplete. This does not argue for making considerably less use of disclosure. But it does sound some cautionary notes. The strong allure of the disclosure solution is unfortunate, although perhaps unavoidable. The admittedly 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 nuanced view of human nature that can better inform policy decisions.

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“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. Some have noted that disclosures were sometimes false or incomplete.\(^2\) What follows, 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 do not understand or even read disclosure. This leads, naturally and unsurprisingly, to prescriptions for yet more disclosure, simpler disclosure, and financial literacy education.\(^5\)

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2. See inter alia 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. at 1362 (“the 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) (“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.”); Steven L. Schwarcz, Regulating Complexity in Financial Markets, 87 Wash. U. L. Rev. 211 (2009). This strain also surfaced 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.
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 the 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.
But the securities at issue in the crisis were generally not sold to retail investors, who might be expected to not read or not understand disclosures. Rather, they were mostly sold to sophisticated institutions: even publicly traded securities like residential mortgage-backed securities (RMBS) were sold in large denomination units which 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 was the case, they should know that they do not; they should not buy until they conclude that they know enough to do so. The investors had ample opportunity to engage with the sellers of the securities, doing due diligence until they were satisfied that they knew enough to make 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, but notably, they also included the savviest of hedge funds and other extremely smart investors.

Moreover, even though the transaction structures were admittedly 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 here 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 them warier than it did or

6 See Schwartz, 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 isn’t 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; 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 this 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, at 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.


otherwise spurred additional investigation. Indeed, considerable evidence exists that in a variety of complex securities transactions, investment decisions were made quickly, thorough due diligence was not done, and the information that was provided was not fully used; this behavior amounted to a seemingly conscious disregard of the risks.\textsuperscript{10} There were, of course, some savvy investors who carefully read the disclosure documents, did extensive due diligence, and made a great deal of money.\textsuperscript{11} 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, since the sophisticated investors’ actions have harmed others. Many sophisticated investors are 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 in some sense causing, and certainly exacerbating the financial crisis.\textsuperscript{12}

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: 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 and has an

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\textsuperscript{10} We discuss this further in Part II.A. infra.

\textsuperscript{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’ The Big Short. See Lewis, supra note 7, at 26-46.

\textsuperscript{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. and Hillary A. Sale, \textit{Redesigning the SEC: Does the Treasury have a Better Idea}, 95 VA. L. REV. 707 (2009).
incentive to present the security more favorably than it warrants. But many investors, even sophisticated investors, do not start their consideration of an investment decision with cautious or neutral presumptions about a security and then, after carefully reading the disclosure and appraising it on its merits, make the decision to invest or not. As has been extensively discussed in the literature, investors may be eager to buy “the hot new thing” that their peers are buying. Why do the peers buy it? One part of the story may be the old and often-told one. Tiring of “boring” returns, some saw an opportunity to supercharge their yields, believing the perennial pitch made for new financial instruments, that they offered more return than risk. 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 decision-making. 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. There are many things people might do if they think they will not be found out. But these answers are importantly incomplete. Better information should, in principle, lead to better decisions, but other factors may be far more important. Such was the case with disclosure regarding the securities at issue in the financial crisis. We discuss another example as well: executive compensation disclosures. Executive compensation is high by many metrics. Those in some sense paying the compensation are company shareholders. Many argue that providing them with more detailed information would cause them to seek to curtail it in some way, perhaps by pressuring their companies or selling their stakes in companies with high compensation. Companies, anticipating shareholder reaction, would curtail their compensation pre-emptively. That was the theory behind more expansive executive compensation disclosures, but it was apparently not the reality. It did not occur because the incremental information was insufficient to prompt shareholder action, but appeared to be sufficient to prompt 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 common sense views about how people make decisions. Decision-making is importantly social in nature. By contrast, disclosure paradigmatically works at the individual level. Because they do not fully take into account the social nature of decision-making, the common sense views turn out to be importantly incomplete. This does not argue for making considerably less use of disclosure. 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

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, In Modeling Risk, the Human Factor Was Left Out, THE N.Y. TIMES, Nov. 4, 2008 (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.”); Steven Lohr, Wall Street’s Math Wizards Forgot a Few Variables, THE N.Y. TIMES, Sept. 12, 2009 (asserting that prior to the financial crisis mathematical financial models failed to “sufficiently take into account was human behavior, specifically the potential for widespread panic.”).
a too-comforting worldview. People losing money on their investments can tell themselves and others that if they had been told enough, they would not have bought the securities. Market participants generally can tell themselves and others that their purported modus operandi, reading disclosure documents and making investment decisions based thereupon, is viable.

The strong allure of the disclosure solution is unfortunate, although perhaps unavoidable. The admittedly 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 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 essay; 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 is 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. The Securities Act of 1933 and its companion Securities Exchange Act of 1934 act were modeled on the British Companies Act of 1928–29 and heavily influenced by the prior work of Louis Brandeis, the Supreme Court justice and crusading attorney. Brandeis had famously advocated for full disclosure concerning securities issuances, stating “sunlight is said to be the best of disinfectants.” 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 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

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15 Louis Loss and Joel Seligman later joined by Troy Paredes, phrase this in their treatise as “disclosure, again disclosure, and still more disclosure”. Louis Loss et al., SECURITIES REGULATION at 8 (2004).
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 penalties for violating disclosure rules. Disclosure’s efficacy was assumed.

The focus on disclosure has continued, and continues today. The SEC began to require projections, extensive MD&A sections, and enhanced executive compensation disclosure. It pushed for preemption of state laws requiring merit review of securities offerings, 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. These are but a few examples of the heavy emphasis on disclosure placed by the SEC and other regulators of our capital markets. Indeed, until the relatively recent emphasis on behavioral factors, the main debate about disclosure was about the extent to which the government should require it, or whether society was better served if the form and content of disclosure was determined by market forces. That the “sunlight” provided by disclosure should and would lead to better investment decisions was unquestioned.

Attitudes towards 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 that disclosed they had no income, revenue, or near-term prospects, it became hard to claim that stock prices reflected all publicly available information. But the bubble did not result in a broader skepticism about the extent to which investors use disclosure for its intended purposes. Because

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18 Regulation of Security Issuances, Message from the President of the United States, Mar. 29, 1933. House Document No. 12, 73rd Congress.
22 For a history of the SEC’s deployment of EDGAR, see http://www.sec.gov/rules/final/33-8590.pdf
25 The regulatory response to the collapse of the technology bubble and 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.
of the entrenched and intuitive nature of disclosure’s role, this should not be surprising. One way to reconcile what happened in the bubble with a continuing reliance on disclosure is that the dot.com bubble involved many retail investors. This might permit retaining the standard narrative of disclosure’s efficacy in a market comprised mostly of sophisticated investors.26

The federal securities laws have also continued to emphasize disclosure. Professor Jeffrey Gordon documents the increase in size of disclosure documents from 1950-2004. During that time period, the average number of pages for a sample of Fortune 500 company 10-Ks went from almost 16 pages to a little over 166 pages with the average number of financial pages going 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 regulations.29

Even for sophisticated transactions not subject to the mandatory disclosure provisions of the federal securities laws, these provisions strongly influence the contents of these documents. 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

26 See, e.g., Eli Ofek & Matthew Richardson, DotComMania: The Rise and Fall of Internet Stock Prices, 58(3) J. Fin. 1113, 1121 (2003) (documenting abnormally higher retail participation in IPOs during the technology bubble). The role of sophisticated investors in the technology bubble is puzzling, and raises the question of why they did not act to quickly reset pricing and pop the bubble. Perhaps many of them were not making informed decisions. But even those who were might have been constrained from making investments that fully exploited their view as to how far the market had departed from “fundamental value.” See generally Claire A. Hill, Why Financial Appearances Might Matter, 22 Del. J. Corp. L.141 (1977), at Section IV A.2
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, Why Contracts are Written in Legalese, 77 Chi. Kent. L. Rev. 59 (2002); Claire A. Hill & Christopher King, How German Contracts Do As Much With Fewer Words, 79 Chi-Kent. L. Rev. 889 (2004). 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, one reason why the lawyer 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 The Dodd–Frank Wall Street Reform and Consumer Protection Act, Title VII (Pub.L. 111-203, H.R. 4173)
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 had direct dealings with the banks structuring the offerings. These transactions played a significant role in the financial crisis when they quickly lost value.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 performed disastrously, including Goldman Sachs’ ABACUS, Citigroup’s Class V Funding III, and CDOs in which Magnetar invested in, 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 by now common explanation for why investors bought these CDOs is insufficient, even misleading, disclosure. This section proposes a different explanation. Many investor purchasing decisions did not reflect careful consideration and examination of the disclosure documents. Second, had investors carefully considered the documents and the transactions on the merits of the investments, they might have made different decisions.34

31 See Protess & Ahmed, supra note 9 (quoting Robert Khuzami head of enforcement at the SEC as stating “[m]ortgage products were in many ways ground zero in the financial crisis”)
33 See Cordell et al., supra note 27, at 3.
34 In Money Doctors, 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...” (at abstract). 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. Whether or not those making the investment decisions ‘know’ better than their decisions would suggest, our point still holds: disclosure is not in any simple way motivating action.
In the years leading up to the financial crisis, investors displayed an enormous appetite for these securities, notwithstanding disclosures that highlighted significant risks. Indeed, investor appetite was apparently so great that there is evidence some investors bought these new issuances quickly, 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, and in fact purchased 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.

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. For example, the offering memorandum for the Class V Funding III CDO discussed below was only completed 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 who sold the transactions. Cases involving some CDOs have yielded 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. Allegations against banks structuring and selling CDOs have included, among other things, that the disclosure was defective. For instance, Goldman acknowledged that “the marketing materials for [ABACUS] included incomplete information”, something that Goldman “regrets.”

35 Trial Transcript of U.S. Securities and Exchange Commission v. Brian H. Stoker, 11 CV 7388 (JSR), at 343 (hereinafter CLASS V FUNDING III TRIAL TRANSCRIPT) (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.
37 CLASS V FUNDING III TRIAL TRANSCRIPT, supra note 35, at 71.
38 Id.
39 See note __, infra.
40 In both instances the transactions and settlements were made by the broker-dealer subsidiaries of each investment bank. In the case of Citigroup Inc. 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.
41 See SEC Press Release, Goldman Sachs to Pay Record $550 Million to Settle SEC Charges Related to Subprime Mortgage CDO: Firm Acknowledges CDO Marketing Materials Were Incomplete and Should Have Revealed
Notwithstanding Goldman’s acknowledgment, we think the disclosure, together with what investors knew simply by virtue of the structure of the transaction, was sufficient to make investors far warier than they were or lead to further investigation. 42 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. 43 Our point, again, is not that CDO or other disclosures in the crisis were perfect or could not have been improved upon. But junk was not depicted as gold, or even as bronze. 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. 44 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. 45 These securities are called “reference securities.” Because the transaction was synthetic, it could only be done 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. 46 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 select for inclusion in the CDO securities that he believed were particularly prone to default. 47
The buyers made their purchases notwithstanding disclosure that emphasized many possible risks. One risk factor disclosed in the 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.” The ABACUS offering memorandum disclosed that the CDO would initially reference 90 different obligations and sets forth each by name, allowing for further due diligence. 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.” 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.” This last risk factor, the mortgage market risk factor, apparently started being included in CDO offering memoranda in early 2007. It appears in another controversial Goldman CDO deal, Timberwolf. Both the ABACUS and Timberwolf offering memorandums stated that “numerous residential mortgage loan originators that originate subprime mortgage loans have recently experienced serious financial difficulties and in some cases bankruptcy.”

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49 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. Some of the matters at issue are subsumed under the general category of ‘plain language,’ but some are not. The broader inquiry of how to alert people to risks in a manner that is effective is beyond our scope. See generally ROGER SHUY, BUREAUCRATIC LANGUAGE IN GOVERNMENT AND BUSINESS (Georgetown University Press 1998)

50 ABACUS OFFERING MEMO, supra note 48, at Appendix A.

51 Id. at 28

52 Id. at 30.

53 See Narayanan Somasundaram and Jonathan Stempel, Goldman sued for $1.07 billion over Timberwolf CDO, Reuters, Oct. 28, 2011, available at http://www.reuters.com/article/2011/10/28/us-goldmansachs-lawsuit-idUSTRE78R4JE20111028. 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 has survived a motion to dismiss. Basis Yield Alpha Fund (Master) v. Goldman Sachs Group et al, supra note 9. We discuss that complaint further at infra note []

The ABACUS offering memorandum also included risk factors about conflicts of interest. The offering memorandum discloses that Goldman “may hold long or short positions with respect to” the underlying securities of the CDO. 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.

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, with CDOs circularly investing in one another was a common occurrence during the period before the financial crisis, came back to haunt many buyers as the subprime crisis intensified and contagion quickly spread among linked CDOs.

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 more information than the buyer, is selling it, which suggests that extra diligence is always warranted. But the point should not be understated either. It was possible, and in fact was the case with ABACUS and many other synthetic CDOs in the 2006

55 ABACUS OFFERING MEMO, supra note 48, at 40.
57 ABACUS OFFERING MEMO, supra note 48, at 71.
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. 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, and indeed, engaged with the sellers, asking some questions, making suggestions for deal terms, and requesting that some securities be included, or omitted, 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 the 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 — our argument rests mostly on what our research suggests, including the language of the disclosures made, and our conversations with practitioners discussed above. 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, that any process that did not lead to that conclusion was somehow inadequate. We also do not want to conclude that any process that did lead to that conclusion was therefore good. But we do think that many investors who bought synthetic CDOs were not asking enough questions, listening with a sufficiently critical ear to the answers, and were otherwise failing to 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 they had done a critical inquiry because they had objected to some possible collateral. We think that the inquiry cannot have been critical enough: they intended all along to buy the security once they could convince themselves it was

60 CLASS V FUNDING III TRIAL TRANSCRIPT, supra note 35, at 504. CDOs with Magnetar involvement named after constellations and President deals underwritten by Morgan Stanley were particularly popular short targets. Id. at 455.
61 Id. at 1228.
“satisfactory.”63 One of us has argued for a similar dynamic with rating agency ratings.64 The outcome of the “inquiry” was never in doubt.65

In the case of ABACUS, Paulson allegedly was 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 role.66 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 someone, even if they did not know who, or his 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.67 Another prominent example involves the hedge fund Magnetar, which came under scrutiny for arranging synthetic CDOs that were in retrospect labeled “doomed to fail.”68 Magnetar helped originate 28 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.69

63 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.
65 Id.
66 SEC COMPLAINT, supra note 46.
67 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. Financial Crisis Inquiry Commission Report at page 265; Dodona I, LLC v Goldman Sachs & Co, 847 F Supp 624 (SCNU 2012) at 34. 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, LLC v Goldman Sachs & Co., 847 F. Supp 2d 624 (S.D.N.Y. 2012); Basis Yield Alpha Fund (Master) v. Goldman Sachs Group, Inc. et al, decided October 18, 2012 (Sup. Ct. N. Y. Cty). See also Richman v. Goldman Sachs Group, Inc. WL 2362539 (S.D. N.Y. June 21, 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).
68 See Jesse Eisinger and Jake Bernstein, The Magnetar Trade: How One Hedge Fund Helped Keep the Bubble Going, PROPUBLICA, Apr. 9, 2010.
A Pulitzer-prize winning team of reporters at ProPublica have alleged that Magnetar, like  
ABACUS, arranged for these CDOs to be structured to include particularly low-quality reference  
securities. 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  
percent of the Magnetar deals it identified were in default by 2008.  
A review of the offering  
memorandums 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 the disclosure in the ABACUS deal, including risk factors as to selection, conflicts of interest,  
and the need to act upon independent information.

Another bank heavily involved in structuring and selling CDOs was Citigroup. Citigroup  
structured and sold Magnetar and many other CDOs. During 2007, Citigroup underwrote 18  
CDOs worth over $20 billion and $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 also contained the same disclosure as ABACUS and  
Timberwolf concerning the declining mortgage market, conflicts of interest, and the need to act  
independently on the buyer’s own information. Apparently, many market participants knew  
that Magnetar was behind the constellation deals.

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

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70 See Eisenger et al., supra note 67. See also Steven M. Davidoff, If Little Else, Banker’s Trial May Show Wall St.  

Offering Memorandum, dated May 10, 2007, available at  


73 See Steven M. Davidoff, CDO 1 Ltd. Offering Memorandum, dated Mar. 16, 2007, available at  
http://www.ise.ie/debt_documents/OctFinalProspectus_7647.pdf; 888 Tactical Fund LTD. Offering Memorandum,  
dated Mar. 20, 2007; Adams Square Funding II LTD. Offering Memorandum, dated Mar. 21, 2007, available at  
http://www.ise.ie/debt_documents/Adams21mar07_6039.pdf; Class V Funding III, LTD. Offering Memorandum,  
CLASS V FUNDING III OFFERING MEMO].

74 CLASS V FUNDING III TRAIL TRANSCRIPT, supra note 35, at 221.

75 See Jesse Eisinger & Jake Bernstein, Did Citi Get a Sweet Deal? Bank Claims SEC Settlement on One CDO Clears It  
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, clearly  
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  
executives-liable/. For further discussion of the issues of board oversight the settlement raises, see generally Claire
“[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 memorandum 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, the portfolio selection agent (CSAC) were acting as “advisors” or “agents” and that any buyer should make its investment decision determine “without reliance” on either. Class V Funding III’s offering memorandum stated that:

“[a]lthough 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.”

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:

In 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.

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.


77 CLASS V FUNDING III OFFERING MEMO, supra note 73, at vii, 42-48.
79 Class V Funding III, Offering Memo, supra note 78 at 45.
80 CLASS V FUNDING III OFFERING MEMO, supra note 73, at 27.
81 Id.
82 CLASS V FUNDING III PITCH BOOK, supra note 78, at 35.
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 performed on the mortgages serving as collateral.\(^8^3\) For example, 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.\(^8^4\) This was something that the offering memorandum expressly warned against.\(^8^5\)

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!”\(^8^6\) Another experienced collateral manager commented that “the portfolio is horrible.”\(^8^6\) 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.\(^8^7\) Class V Funding III went into default only months after it was priced and sold.

The SEC 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.\(^8^8\) At a civil trial held in July 2012, Mr. Stoker argued vociferously that there was sufficient disclosure made of this transaction. He further argued that the buyers were sophisticated enough to have done more, had warning to do so, but did little. A civil jury acquitted Mr. Stoker.\(^8^9\)

\(^8^3\) Class V Funding III Trial Transcript, supra note 35, at 428-429 (testimony of Sohail Khan, a salesperson at Citi for Class V Funding III, that investors did not look at individual securities, they were investing based on a macro-economic views of the housing market) and at 1260-62 (testimony of David Salz that Class V Funding III investor Ambac only looked at summary information and not the actual mortgages underlying the CDO).

\(^8^4\) 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.”).

\(^8^5\) Class V Funding III Offering Memo, supra note 73, at vii, 42-48.


\(^8^7\) See supra note 60.

\(^8^8\) See supra note 86.

A federal district court, too, reasoned similarly in its opinion rejecting a claim by the hedge funds Epirus Capital Management, LLC and Dodona I, LLC against Citigroup related to its underwriting of the Octonion CDO. The hedge funds alleged that Citigroup had influenced the selection agent to place other CDOs underwritten by Citigroup that it could not sell. The federal district court instead traced carefully through the offering memorandum and noted that it had disclosed that the CDO might contain other CDOs underwritten by Citigroup and that investors were adequately put on notice to make their own risk assessment.\(^90\)

These cases arose out of CDOs marketed and sold in the months preceding the financial crisis. But a review of the library of over 100 CDO offering memos put together by the Financial Crisis Inquiry Commission and made publicly available, finds similar disclosure in 2004 and 2005.\(^91\) 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.\(^92\) 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 isn’t the standard answer that the securities are simply too complex to evaluate correctly? Due diligence on CDOs is very difficult; it is even more difficult on synthetic CDOs. The CDOs are, after all, comprised of RMBS. Those securities are comprised of actual mortgages, securitized themselves. Synthetic CDOs also referenced interests in other CDOs. The complexity is not masked, though. Investors aren’t led to believe they understand when they don’t. If reaction to complex disclosures is to buy the security, perhaps, so long as reputable parties are involved and give their approval, then surely disclosure isn’t serving much of a purpose. Why not dispense with the disclosure and just keep the reputational information? In any event, what the disclosure cautioned against was not related to the securities’ complexity, and is what caused the securities to decline in value.

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. Appropriate diligence wasn’t done on RMBS either, though. 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 didn’t do their due diligence, the RMBS investors. Second, large-scale


\(^91\) The prospectuses we reviewed were those publicly disclosed by the Financial Crisis Inquiry Commission and are available at http://fcic.law.stanford.edu/resource/staff-data-projects/cdo-Library

static.law.stanford.edu/cdn_media/fcic-docs/2005-03-00_Abacus%202005-1_CDO%20Offering%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 at __
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 bubble was starting to inflate, lack of experience with subprime securities should have led to wariness.  

Other objections to our arguments are that the securities were presented as being vouched for by reputable intermediaries: the banks who 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 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 such 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, and clearly instructs the investors to do their own due diligence, identifying the securities in which the investors were effectively investing, as well as telling them that both Goldman and ACA might have non-public information about the securities that they were not disclosing.

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 over-eager 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

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93 The offering memorandums for synthetic CDOs contained risk factor disclosure on their novelty. See ABACUS OFFERING MEMO, supra note 48, at 25, 34.

94 ABACUS OFFERING MEMO, supra note 48, 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.

95 See, e.g., infra note 115.
documents. Instead, they relied almost exclusively on the credit ratings of these products despite various warnings against such over-reliance in the PPM and elsewhere.\(^{96}\)

\[\text{C. Executive Compensation}\]

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 suggest that heeding disclosure sometimes can have unintended negative effects.

For the past 60 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.\(^{97}\) 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.\(^{98}\) 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 non-binding shareholder votes on pay, so-called “say on pay.”\(^{99}\) It also requires companies to disclose to what extent they have taken the shareholder vote into account in their compensation decisions.\(^{100}\) When making its August 2006 changes, the SEC gave the traditional rationale for disclosure: that boards and shareholders would make better decisions with better information.\(^{100}\) 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 action.

Extensive disclosure about compensation is thus required, and readily available.\(^{101}\) But its effect has, it seems, not been to rein in executive pay. Indeed, there is evidence that disclosure

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100 2006 EXECUTIVE COMPENSATION RELEASE, supra note 25, at 10-11.
101 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. The website has a worst footnote of the year contest every year highlighting egregious executive compensation. This past year’s winner was Hewlett-Packard for the $36 million
may have had the opposite effect. Those who care about the disclosure the most may be CEOs and other executives. They now have full access to the details about compensation of their peers. This can be used in negotiations to ratchet up 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.\(^\text{102}\)

Disclosure itself appears to have helped empower executives to demand higher pay packages, thus helping to push compensation up. The spiraling compensation numbers are well known. In 1965 the average ratio of total direct compensation for a CEO to the average production worker was 24.2 to 1, a figure which stood at 185.3 to 1 in the depths of the financial crisis in 2009.\(^\text{103}\) From 1980 through 2003, CEO pay increased six-fold.\(^\text{104}\) The average pay of a CEO of a Fortune 500 company is now $12.1 million.\(^\text{105}\)

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.

As an alternative to pure disclosure, the recent introduction of shareholder votes on pay appears to have had 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, modify compensation accordingly. Indeed, there is some evidence that say on pay may be helping to moderate executive pay in certain circumstances.\(^\text{106}\) This is despite the fact that the vast majority of S&P 500 companies in the United States, 97%, earn positive “say on pay” votes.\(^\text{107}\) It may be that say on pay has an effect in particularly salient circumstances but

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\(^\text{103}\) 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 Sullivan & Cromwell LLP, Say on Pay Review of 2012 Proxy Season
in the vast majority of cases, simply validates pre-existing compensation. 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.\footnote{See Steven M. Davidoff, Efforts to Rein in Executive Pay Meet with Little Success, THE N.Y. TIMES, July 12, 2011; Steven M. Davidoff, Humanitarian Effort in Congo Puts S.E.C. in Unintended Role, THE 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.”) Id. at \_\_\_\_\_\_\_\_.}

The provision in the Dodd-Frank Act requiring companies to explain to what extent they take into account the shareholder vote may also constrain behavior. But disclosure by itself apparently did not do what it was supposed to do, and indeed, 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. Factors such as the financial crisis, with its high unemployment amid continuing corporate profits, and the immediate post-crisis specter of regulation, may have made a difference; there have recently been some negative say on pay votes at prominent companies, as we discuss below. The bottom line is that the effects of disclosure are more complicated than the classic rationale for disclosure suggests.

III. BEHIND THE CRITICISMS

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 got. 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 discount to reflect quality issues or uncertainty and transactions were being churned out to meet demand.\footnote{See generally Claire A. Hill, Why Didn’t Subprime Investors Demand (Much More of) a Lemons Premium?, 74 LAW & CONTEMP. PROB. 101 (2011).} 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. Many of the standard critiques consider that disclosure can be difficult to understand, and therefore prescribe more ‘plain language’ or more education in, for instance, financial literacy. Some critiques emphasize how few people read disclosure documents. Some argue that disclosure is insufficient, and 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 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. 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 hopeful to be that retail investors could ultimately make better investing decisions. We are 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 essay, 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. 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

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110 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.


112 See generally Ben-Shahar, supra note 4


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 done. The big question to be answered is: 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, too, 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’ complexity or, more importantly for our purposes, the conflict of interest of the seller.\footnote{The disclosures of risk factors were scarcely 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 effectively 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 real 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 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, two-thirds 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.

\textit{CLASS V FUNDING III TRIAL TRANSCRIPT, supra} note 35, at 1264-65. Ambac lost more than $300 million investing in Class V Funding III. \textit{See} Steven M. Davidoff, \textit{supra} note 70.
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. But many of the risk factors at issue were specific to these sorts of transactions, and put investors on notice to investigate thoroughly. 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. Moreover, if there were many material misstatements and omissions in the disclosure documents, this would, we think, have been revealed. Instead, the lack of lawsuits and accountability has been bemoaned. Our sense is that the disclosure’s defects, such as they were, would not have made much, if any, difference to the buyers’ decisions. 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. Individual bankers might be motivated to sell, get their bonuses, and run to another bank. 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? Certainly, investors wasted no time in blaming the agencies and trumpeting their reliance. But did they rely on ratings? Would such reliance have been justifiable? 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

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116 Taken to its extreme, our reasoning would suggest that people need to be far warier than they are regarding “boilerplate” warnings. Indeed, that people should not buy anything, as an acontextual reading of boilerplate risk factors might seem to support. 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.

117 This is particularly true for transactions in 2005 and later years. See infra notes 91-92 and accompanying text.

118 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 conflict of interests to uniquely fit this transaction. See CLASS V FUNDING III TRIAL TRANSCRIPT, supra note 38, at 1335


121 See Hill, supra note Error! Bookmark not defined.. 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 See Claire A. Hill, Why did anyone listen to the rating agencies after Enron?, 4 Mo. J. BUS & TECH. LAW 283 (2009).

122 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 117 and Hill, supra noteError! Bookmark not defined.. 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.
investing based on an AAA rating? We of course think not. Indeed, if ratings were sufficient, investors investing for others are wildly overpaid. They 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: Enron, Worldcom, and Adelphia. Thus, a high rating would not seem to have excused investors from making their own assessments.  

Almost all investors buying the securities at issue were investing other people’s money. They were selling their services as experienced and expert selectors of securities. Such investors did not depict themselves to others and themselves as almost mechanically just saying ‘yes’ to securities they knew they did not understand. Surely nobody would invest with a money manager who said in its marketing materials “I buy anything Goldman Sachs offers me that is rated AAA.”

An answer as to why sophisticated investors buy subprime securities in the volumes and on the terms they did despite the disclosure made is beyond the scope of this essay. 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.  

Once a money manager knows that his peers are buying an investment, his best strategy is to buy it too. 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. Disclosure could still work as intended if those effectively leading the herd—that is, 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

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123 Support the argument that reliance on ratings is something other than an assessment that the rating agencies get it right, contrast the loud criticisms of the agencies immediately post-crisis and continuing to their continuing influence and market share. The story ‘investors didn’t pay enough attention to the disclosures because they looked to the ratings, but they will now, since the agencies did such a bad job with CDOs’ seems implausible on many counts, one of which is that the agencies retain enormous influence, influence that seems impervious to strong evidence that they can get it profoundly wrong. We would rule out as an explanation for the present reliance on rating agencies that having been chastened, and/or Dodd-Frank reforms, will yield better agency performance. Certainly, being chastened didn’t help the agencies’ post-Enron performance.


126 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.
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 did not work as intended. Shareholders, especially those of a company whose stock had declined, did not feel outraged upon hearing the specifics of the CEO’s large compensation package. The expectation that they 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 afterwards 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? Because of two deeply ingrained common sense assumptions: that (1) better information yields better decisions and (2) having to reveal potentially embarrassing conduct will constrain the conduct. These assumptions are not wholly false. Rather, they fail because 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, perhaps “sophisticated” investors wishing to minimize their downside risk by copying their peers’ investments. With executive compensation, the better information did not inspire action by outraged shareholders or constraint by the company 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 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. Disclosure is importantly social, something which has important implications to be developed in future work.

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—“oh, that’s just there

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127 One reason 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.
because the lawyers have to include that,” or “well, 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. 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.\(^{128}\) Can we understand enough about language to do better? What would better be here? 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 so that it does a better job of informing is a complicated proposition, and may not be nearly as helpful as might be hoped. As for executive compensation disclosure, ex post, we could tell a story that perhaps we might have been able to anticipate. But probably not. Compensation disclosure stoking outrage is intuitively quite plausible. Outrage may finally be being stoked. “Say on pay” no votes have doubled this year, although they are still exceedingly high. Approval rates are now 97% of all S&P 500 rather than almost 99% in say on pay’s first full year.\(^{129}\) Still, the increase is significant, as is the fact that well-known companies have been among those getting such votes: Citigroup and Barclays. But Citigroup and Barclay’s have gotten terrible publicity for their bad conduct during and after the financial crisis. We may have the beginnings of a trend, but we may also simply have a reaction to extreme circumstances.\(^{130}\)

The mechanism probably is not that the shareholders have additional information that makes a difference in how they view their companies’ executive compensation. The votes in these cases appear to be spurred by the coincidence of a number of unrelated factors, such as the financial crisis, 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, 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 it was not clear how to act on it. The lesson, again, is that in considering solutions, we cannot just rely on the assumption that people simply read and act on disclosure.

\(^{128}\) See Shuy, supra note 49.

\(^{129}\) See Sullivan & Cromwell, supra note 104.

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 reform. 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. 131

Whenever there is a bad event that is salient, 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 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. 132 As individuals, too, we like to think that if we are given the right information we will make the right decisions. 133 It is easier to blame someone who should have made 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. 134 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,

132 See Ben-Shahar, supra note 4.
133 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 Queen’s L. J. 185 (2009)
134 See Zuckerman, supra note Error! Bookmark not defined..
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 selection was at the time not only unproven but, according to some accounts, was 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 for, a selection, probably ex-post, by Goldman itself.\textsuperscript{135}

We have no grand solutions to offer to fix the problem we identify here. We do, however, have a few modest suggestions. First, one of us has argued elsewhere for an “unsafe harbor,” under which investors justifying their investment decisions to a court could not invoke reliance on third party certification as their sole or principal decision-making technique.\textsuperscript{136} This would ensure that sophisticated investors take some responsibility for their decision-making or lack thereof. Second, other mechanisms to amplify the critical voices could be considered. We note in this regard recent work by Brett McDonnell and Dan Schwarcz on Regulatory Contrarians and Ross Levine and co-authors on The Sentinel. This work contemplates empowering someone within government to espouse contrary views or simply be independent.\textsuperscript{137}

Another suggestion is to encourage wariness at too-ready use of expensive disclosure requirements. Conflicts mineral disclosure is a good example. We think an infelicitous storm resulted in these rules: general condemnation of use of monies from minerals mined in certain parts of the world to fund horrific armed conflict, desire to be seen to be doing something about \textit{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.\textsuperscript{138}

In any event, policymakers and commentators should be more 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 common sense 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,

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\item One of us, Hill, is writing a book with Richard Painter arguing, in effect, that whether or not the disclosure was adequate, banks should not engage in transactions like ABACUS. The argument in this paper that the disclosure documents put investors on notice is orthogonal. The Hill/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.
\item Hill, \textit{supra} note \textit{Error! Bookmark not defined.}. 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: allowing some reliance on ‘experts’ but requiring those who rely to have a good reason for their reliance, where courts would pass on whether the reason was good enough.
\item See Davidoff, \textit{supra} note __.
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we urgently need to understand how people, including supposed experts, take in and act on information.