

A Glass-Half-Empty Approach to Securities Regulation

Wendy Gerwick Couture

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A GLASS-HALF-EMPTY APPROACH TO SECURITIES REGULATION

WENDY GERWICK COUTURE*

ABSTRACT

In this Article, I propose a novel approach, which I call the “glass-half-empty” approach, to analyze the appropriate boundaries of securities regulation. This approach assumes a baseline of “full” regulation and then analyzes which regulations should be stripped away because the costs exceed the benefits. This is the opposite of the traditional approach, which assumes a baseline of zero regulation, identifies a market failure, and then weighs the costs and benefits of regulatory intervention.

Although, in theory, the two approaches should reach the same conclusions about the appropriate bounds of securities regulation, the glass-half-empty approach yields new insights because it is a clearer way to identify boundary lines in a heavily-regulated field, reveals areas that have been overlooked under the traditional approach, is more likely to result in a coherent regulatory scheme than the current piecemeal approach, and defrays any bias against adding regulatory burdens that may infect the glass-half-full approach. The glass-half-empty approach, when applied to the fundamental components of securities regulation, supports several dramatic reforms to the current boundaries of securities regulation.

I hope that the glass-half-empty approach, alongside the traditional approach, will become an integral part of future scholarly analysis about the appropriate bounds of securities regulation and that the insights that this approach reveals will be incorporated into future reforms of securities regulation, leading to a more comprehensive, coherent, and unbiased regulatory scheme that furthers accuracy in securities pricing.

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INTRODUCTION

The traditional approach to securities regulation assumes a baseline of zero regulation, identifies a market failure, and then weighs the costs and benefits of regulatory intervention. Under the nomenclature of this Article, this is a “glass-half-full” approach, which examines what types of regulations should be added to solve problems that arise in the absence of regulation.

I take the opposite approach, assuming a baseline of “full” regulation and then analyzing which regulations should be stripped away. I dub this the “glass-half-empty” approach to securities regulation. The glass-half-empty approach requires three steps. First, define “full” regulation. This definition should attempt to hypothesize what it would look like to fully regulate the field, without being confined by political reality. Second, design a methodology for removing regulation from this hypothesized “full” state. Third, applying that methodology, carve away components of “full” regulation and compare the resulting boundary lines to the current regulatory scheme, which was crafted under a glass-half-full approach.

Although, in theory, the two approaches should reach the same conclusions about the appropriate bounds of securities regulation, the glass-half-

empty approach yields new insights. It is a clearer way to identify boundary lines in a heavily regulated field and reveals areas that have been overlooked under the traditional approach. Furthermore, it is more likely to result in a coherent regulatory scheme than the current piecemeal approach, and it defrays any bias against adding regulatory burdens that may infect the glass-half-full approach. As such, I contend that no analysis of the appropriate boundaries of securities regulation is complete without applying both approaches.

The glass-half-empty approach, when applied to the fundamental components of securities regulation, supports several dramatic reforms to the current boundaries of the field. In particular, this approach recommends the addition of several new forms of regulation, including: (1) federal merit review of private offerings to unsophisticated investors; (2) a revision to the trigger for mandatory disclosure; (3) the abolition of the safe harbor from liability for mandated forward-looking statements; (4) a change in the focus of liability standards from the context of disclosure to the content of disclosure; and (5) the imposition of damage caps for misrepresentations and omissions made to the secondary market.

This Article proceeds in five parts. In Part I, I present the glass-half-empty approach, delineating the steps and rationales for this new analytical tool. In Part II, I argue that the primary goal of securities regulation is to achieve price accuracy. Then, in Parts III, IV, and V, in light of the goal of achieving price accuracy, I apply the glass-half-empty approach to three fundamental areas of securities regulation: regulation of offerings; mandatory disclosure by public companies; and public company liability for misrepresentations and omissions. I have chosen these areas because they are at the core of securities regulation, unlike those components of the federal securities laws, such as proxy solicitation and shareholder proposals, which James J. Park has aptly categorized as “federal corporate law.”¹ I compare the insights yielded by this approach to other scholars’ proposed reforms in these core areas of securities regulation, which were crafted under the glass-half-full approach. In closing, I argue that the glass-half-empty approach, in conjunction with the traditional glass-half-full approach, should become an integral part of future scholarly analysis about the appropriate bounds of securities regulation and that the reforms it supports should be incorporated into the future regulation of securities.

I. GLASS-HALF-EMPTY APPROACH

The traditional approach to securities regulation assumes a baseline of zero regulation, “identif[ies] a market failure,” and then “weigh[s] the costs

1. James J. Park, *Reassessing the Distinction Between Corporate and Securities Law*, 64 UCLA L. REV. (forthcoming 2017).

and benefits of . . . regulatory intervention.”² For example, under the classic articulation, issuers of securities are required to disclose certain material information to investors in order to address information asymmetries that would exist absent regulation.³ Under the nomenclature of this Article, this is a “glass-half-full” approach, which examines what regulations are required to solve problems that arise in the absence of regulation.

I take the opposite approach, assuming a baseline of “full” regulation and then analyzing which regulations should be stripped away. I dub this the “glass-half-empty” approach to securities regulation. Dale Arthur Oesterle has colorfully compared this approach to stripping a race car:

Should We Work From Top Down or Bottom Up? As every amateur race car driver knows, when competing in a production based racing class, you can purchase a production car and strip it down to race trim or purchase spare parts and build a car from the frame up. Most do the former; it is less expensive and takes less time, and you are less likely to leave something major out.⁴

I argue that a comprehensive analysis of securities regulation requires not only the current glass-half-full approach, but also the complementary glass-half-empty approach.

The glass-half-empty approach requires three steps. First, one must define “full” regulation. This definition should be an attempt to hypothesize what it would look like to fully regulate the field, without being confined by political reality. Second, one must design a methodology for removing regulation from this hypothesized “full” state. Third, applying that methodology, one must carve away components of “full” regulation, comparing the resulting boundary lines to the current regulatory scheme, which was crafted under a glass-half-full approach.

In theory, the glass-half-full and the glass-half-empty approaches should yield the same conclusions about the appropriate bounds of securities regulation. In other words, using Professor Oesterle’s analogy, they should result in the same race car. In practice, however, the glass-half-empty approach reveals new insights. First, the glass-half-empty approach is sometimes a clearer way to identify boundary lines than the glass-half-full approach. For example, as Frederick Schauer has argued in the context of the

2. Michael D. Guttentag, *An Argument for Imposing Disclosure Requirements on Public Companies*, 32 FLA. ST. U. L. REV. 123, 146 (2004).

3. See e.g., Joel Seligman, *The Obsolescence of Wall Street: A Contextual Approach to the Evolving Structure of Federal Securities Regulation*, 93 MICH. L. REV. 649, 649–50 (1995) (explaining that “the primary policy of the federal securities laws involves the remediation of information asymmetries” by mandating disclosure).

4. Dale Arthur Oesterle, *The Inexorable March Toward a Continuous Disclosure Requirement for Publicly Traded Corporations: “Are We There Yet?”*, 20 CARDOZO L. REV. 135, 138 (1998).

First Amendment, “[i]f we examine the speech that the First Amendment ignores, we can begin to perceive the boundaries of the First Amendment.”⁵ Likewise, in light of the vast array of regulations governing securities, a focus on the areas where regulation is not merited is potentially more helpful in discerning the appropriate boundaries of securities regulation than a focus on the areas where regulation is merited. Second, the glass-half-empty approach may highlight areas that the glass-half-full approach has overlooked. Third, the glass-half-empty approach is more likely to result in a coherent regulatory scheme. After all, “a heaping of individual rules” poses the risk of “internal incoherence.”⁶ Finally, the glass-half-empty approach defrays any bias against adding regulatory burdens, which may affect the analysis under the glass-half-full approach. Therefore, the glass-half-empty approach has the potential to reveal areas that should be regulated either more or less stringently, or deregulated altogether.

To the extent that the glass-half-empty approach and the current glass-half-full approach suggest different boundary lines for securities regulation, one must determine the reason for the discrepancy. If the glass-half-empty approach identifies overlooked areas, areas of internal incoherence, or areas left untouched because of anti-regulatory bias, the discrepancy would recommend a change to current regulation. If, however, the discrepancy is a reflection of underlying uncertainty, it would tee up a policy discussion about the appropriate regulatory response to that uncertainty. For example, Brett McDonnell, drawing from the competing insights of Friedrich Hayek, Michael Oakeshott, and John Maynard Keynes on the appropriate role of regulation in the face of uncertainty, has argued for “cowardly interventions” that would “identify[] the biggest problems that we currently face and address[] those problems with limited new rules informed by best practice and subject to constant re-evaluation.”⁷

Notably, although most of securities regulation is crafted under the glass-half-full approach, Congress has, in certain areas, codified the glass-half-empty approach. For example, the Securities Act broadly prohibits all offers and sales of securities absent the filing of a registration statement⁸ and then strips that prohibition away for certain securities and transactions.⁹ Similarly, state blue sky laws broadly coexist alongside the federal securities laws and then are stripped away via federal preemption or preclusion in certain

5. Frederick Schauer, *The Boundaries of the First Amendment: A Preliminary Exploration of Constitutional Salience*, 117 HARV. L. REV. 1765, 1768 (2004).

6. Oesterle, *supra* note 4, at 184.

7. Brett McDonnell, *Don't Panic! Defending Cowardly Interventions During and After a Financial Crisis*, 116 PENN ST. L. REV. 1, 3, 5 (2011).

8. 15 U.S.C. § 77e(a) (2012).

9. *Id.* §§ 77c–77d.

defined areas.¹⁰ Therefore, as a corollary to my thesis, a comprehensive analysis of these areas of securities regulation should entail not only the current glass-half-empty approach, but also a glass-half-full approach.

Finally, it is important to reiterate the appropriate role of the glass-half-empty approach. First, I argue that the glass-half-empty approach should supplement, not replace, the current glass-half-full approach. Relying on only the glass-half-empty approach would pose its own set of problems, including the potential for over-regulation. Second, I argue that once appropriate boundaries are identified using the glass-half-empty approach, those boundaries should continue to be implemented under the current glass-half-full approach. Although securities could actually be regulated under the glass-half-empty approach as some countries like Australia and New Zealand have done,¹¹ such a dramatic reconfiguration of the current regime, however, is unnecessary.

II. PRIMARY GOAL OF REGULATION OF OFFERINGS, MANDATORY DISCLOSURE, AND PUBLIC COMPANY LIABILITY

Any analysis of the appropriate scope of securities regulation—including the glass-half-empty approach—must begin with the central purpose of that regulation. I argue that the primary goal of securities regulation is to achieve price accuracy.

Securities prices are accurate when they reflect fundamental (or intrinsic) value.¹² In other words, a securities price is accurate when it represents the discounted value of future cash flows to which the securities holder will

10. *Id.* §§ 77p, 77r, 77r-1; *id.* § 78bb.

11. Oesterle, *supra* note 4, at 137.

12. Marcel Kahan, *Securities Laws and the Social Costs of “Inaccurate” Stock Prices*, 41 DUKE L.J. 977, 979 (1992) (characterizing the creation of “stock markets in which the market price of a stock corresponds to its fundamental value” as one “principal goal of securities laws”); Donald C. Langevoort, *Information Technology and the Structure of Securities Regulation*, 98 HARV. L. REV. 747, 781 (1985) [hereinafter Langevoort, *Information Technology*] (“By providing investors with the information necessary to make knowledgeable investment decisions, mandatory disclosure is designed to ensure that the market price truly reflects the intrinsic value of the security.”); *cf.* Alan R. Palmiter, *Pricing Disclosure: Crowdfunding’s Curious Conundrum*, 7 OHIO ST. ENTREPREN. BUS. L.J. 373, 427 (2012) (describing “[h]elping investors translate information into price” as “the fundamental role of securities law”).

be entitled.¹³ Price accuracy is admittedly an elusive concept because it depends on a prediction of future events.¹⁴ Even so, that does not mean that securities regulation should not attempt to achieve it, even if imperfectly.

Price accuracy is the primary goal of securities regulation because, generally speaking, accurate securities prices promote the efficient allocation of capital. Accurate pricing of securities at the time of offering, specifically, directly affects allocative efficiency.¹⁵ If the cost of capital to pursue a project is aligned with the social cost of investing savings in that project, “savings are allocated more efficiently, going more to the most promising proposed projects in the economy.”¹⁶ For this reason, securities offerings have “a special economic significance.”¹⁷ Accurate pricing of securities in the secondary market does not directly affect allocative efficiency because the proceeds of secondary market transactions do not inure to the issuer; rather, the issuer’s management has discretion in determining investment activity post-issuance.¹⁸ Secondary market prices do, however, indirectly affect allocative efficiency by influencing management’s exercise of that discretion in three ways.¹⁹ First, secondary market prices can affect the terms on which intermediaries are willing to extend financing.²⁰ Second, secondary market prices can affect the willingness of management to use debt financing to finance a project.²¹ Third, secondary market prices can convey information to management about the advisability of investment opportunities.²²

13. Alicia J. Davis, *Market Efficiency and the Problem of Retail Flight*, 20 STAN. J.L. BUS. & FIN. 36, 43–44 (2014) (“Share prices are accurate when they reflect fundamental corporate value. They do this by incorporating information that predicts future cash flows to shareholders over the life of the firm.”); Merritt B. Fox et al., *Law, Share Price Accuracy, and Economic Performance: The New Evidence*, 102 MICH. L. REV. 331, 344 (2003).

14. Robert G. Newkirk, Comment, *Sufficient Efficiency: Fraud on the Market in the Initial Public Offering Context*, 58 U. CHI. L. REV. 1393, 1399 (1991); Daniel R. Fischel, *Efficient Capital Markets, the Crash, and the Fraud on the Market Theory*, 74 CORNELL L. REV. 907, 914 (1989).

15. John C. Coffee, Jr., *Market Failure and the Economic Case for a Mandatory Disclosure System*, 70 VA. L. REV. 717, 734 (1984).

16. Fox et al., *supra* note 13, at 339; *see also* Kahan, *supra* note 12, at 1006 (explaining that, if securities are issued at inaccurate prices, funds may flow to unprofitable projects rather than lucrative ones).

17. SEC. & EXCH. COMM’N, DISCLOSURE TO INVESTORS: A REAPPRAISAL OF FEDERAL ADMINISTRATIVE POLICIES UNDER THE ’33 AND ’34 ACTS 60 (1969).

18. *Id.* at 60; James Dow & Gary Gorton, *Stock Market Efficiency and Economic Efficiency: Is There a Connection?*, 52 J. FIN. 1087, 1087 (1997); Lynn A. Stout, *The Unimportance of Being Efficient: An Economic Analysis of Stock Market Pricing and Securities Regulation*, 87 MICH. L. REV. 613, 694 (1988).

19. Fox et al, *supra* note 13, at 367 (analyzing the results of several studies and concluding that “more accurate share prices improve the quality of choice among new proposed investment projects in the economy”).

20. *Id.* at 341.

21. *Id.*

22. Dow & Gorton, *supra* note 18, at 1105.

Further, accuracy of securities prices protects investors by ensuring that they invest at “fair” prices,²³ which, in turn, increases liquidity and the flow of capital to the market. If investors purchase securities at prices that accurately reflect their intrinsic value at the time of purchase, they are protected from paying more than securities are worth.²⁴ As explained by Stephen Choi, “[s]o long as the market price reflects a company’s investment risk, even unsophisticated investors are compensated ex ante.”²⁵ In turn, if investors are confident that they are investing at fair prices, they will be more willing to invest in securities, increasing the flow of capital to businesses.²⁶ In a classic articulation of the relationship between fair prices and an individual’s willingness to invest, as stated by the Supreme Court in *Basic Inc. v. Levinson*,²⁷ “it is hard to imagine that there ever is a buyer or seller who does not rely on market integrity. Who would knowingly roll the dice in a crooked crap game?”²⁸ In addition, if investors are confident that prices are fair, they will be more willing to trade, increasing liquidity.²⁹ Increased liquidity benefits all investors by reducing the transaction costs of trading and enabling investors to adjust their portfolios.³⁰

Additionally, accurate securities prices reduce the likelihood of bubbles, resultant crashes, and the ripple effects of crashes on the real economy.³¹ As

23. George T. Benston, *Required Disclosure and the Stock Market: An Evaluation of the Securities Exchange Act of 1934*, 63 AM. ECON. REV. 132, 151–52 (1973) (arguing that a stock price that reflects an “unbiased estimat[i]on of [its] intrinsic value” is “fair” because an investor who decides to trade the security “can be assured that the market price has discounted completely the financial information”).

24. Fischel, *supra* note 14, at 911–12.

25. Stephen Choi, *Regulating Investors Not Issuers: A Market-Based Proposal*, 88 CAL. L. REV. 279, 303 (2000).

26. Davis, *supra* note 13, at 40 (noting that “declining confidence in U.S. markets by American citizens” as a cause of retail investors’ exodus from the markets); Daniel J. Morrissey, *The Road Not Taken: Rethinking Securities Regulation and the Case for Federal Merit Review*, 44 U. RICH. L. REV. 647, 688 (2010) (stating that “[f]aith in the integrity of our capital markets is essential if businesses are to receive the funding they need from investors”); Susanna Kim Ripken, *The Dangers and Drawbacks of the Disclosure Antidote: Toward a More Substantive Approach to Securities Regulation*, 58 BAYLOR L. REV. 139, 154–55 (2006).

27. 485 U.S. 224 (1988).

28. *Id.* at 246–47 (quoting *Schlanger v. Four-Phase Systems Inc.*, 555 F. Supp. 535, 538 (S.D.N.Y. 1982)).

29. Kahan, *supra* note 12, at 1018–19 (“[A]n investor who has no special reason to believe that XYZ Corp. is undervalued or overvalued, but knows that others have such reasons, would expect to lose. . . . Thus, a rational unsophisticated investor will tend to refrain from trading—and suffer a corresponding reduction in the liquidity of her investments.”); see also Zohar Goshen & Gideon Parchomovsky, *The Essential Role of Securities Regulation*, 55 DUKE L.J. 711, 765 (2006) (“A higher risk of asymmetric information implies a larger bid-ask spread, and lower liquidity.”).

30. Kahan, *supra* note 12, at 1019–20 (explaining that a “decline in liquidity” imposes “transaction costs of trading; and costs of holding non-optimal portfolios”).

31. Kahan, *supra* note 12, at 1035 (explaining that inaccurate securities prices can “increase the likelihood of major crashes, and therefore raise the possibility of recessions”); Morrissey, *supra* note 26, at 648–49 (discussing how speculative investments led to the 2008 financial crisis).

explained by Ronald J. Colombo, “[t]his concern is not so much about protecting investors from themselves, but about protecting everyone from those who would invest imprudently.”³² The impacts of market crashes reach far beyond investors themselves, impacting jobs, availability of credit, and overall economic activity.³³

Finally, accurate securities prices in the secondary market can reduce agency costs by providing feedback on management decisionmaking. That information aids shareholders when exercising their voting rights and enforcing managers’ fiduciary duties.³⁴ In addition, it increases “the threat of hostile takeover when managers engage in non-share-value-maximizing behavior”³⁵ and provides lenders with information about manager opportunism.³⁶ All of these actors, informed by an accurate share price, have the power to rein in misbehaving managers.

For these reasons, I contend that price accuracy is the primary goal of regulating offerings, mandatory disclosure, and public company liability. However, this contention is far from uncontroversial. Other scholars have posited different primary goals, such as market efficiency, an optimal level of securities analysis, protection of investors, and reduction of agency costs. For the reasons below, I argue that each of these alternate articulations is intrinsically related to price accuracy and that, in fact, price accuracy best describes the primary goal of regulation.

First, many scholars argue that the primary goal of securities regulation is market efficiency. For example, Zohar Goshen and Gideon Parchomovsky contend in their article, *The Essential Role of Securities Regulation*: “[S]cholarly analysis of securities regulation must proceed on the assumption that the ultimate goal of securities regulation is to attain efficient financial markets and thereby improve the allocation of resources in the economy.”³⁷ They further explain, “[t]he two main determinants of market efficiency are share price accuracy and financial liquidity.”³⁸

The goal of market efficiency fails to encapsulate the breadth of securities subject to regulation, however, because it applies only to securities that are publicly traded, either on exchanges or over-the-counter. Many securities

32. Ronald J. Colombo, *Merit Regulation Via the Suitability Rules*, 12 J. INT’L BUS. & L. 1, 6 (2013).

33. See Ripken, *supra* note 26, at 198.

34. Fox et al., *supra* note 13, at 339–40.

35. *Id.* at 340.

36. Alan R. Palmiter, *Toward Disclosure Choice in Securities Offerings*, 1999 COLUM. BUS. L. REV. 1, 28 n.66 (explaining that lenders can provide a check on managers by withholding credit or calling loans).

37. Goshen & Parchomovsky, *supra* note 29, at 713.

38. *Id.* at 714.

are never intended to be publicly traded, and yet they are regulated as well.³⁹ Therefore, as a motivating principle for securities regulation, the goal of market efficiency is under-inclusive.

That is not to say that market efficiency is irrelevant to price accuracy; rather, market efficiency is a means of accomplishing share price accuracy. Under the Efficient Capital Markets Hypothesis (“ECMH”), in an efficient market, all publicly available information is reflected in a share’s price.⁴⁰ This “informational efficiency”⁴¹ is an approximation of the share’s intrinsic value,⁴² otherwise known as “value efficiency.”⁴³ Therefore, the goal of market efficiency is consistent with the goal of price accuracy, but it is a means of achieving that goal, not an end in and of itself.

Second, other scholars argue that the primary goal of securities regulation is to ensure the optimal level of securities research by analysts and other market professionals.⁴⁴ For example, John C. Coffee, Jr. argues that, “if market forces are inadequate to produce the socially optimal supply of research, then a regulatory response may be justified.”⁴⁵ Again, I do not disagree that securities analysis is important. However, its importance is derived from its effect on share price accuracy.⁴⁶ Like market efficiency, securities analysis is a means to accomplish share price accuracy.

Third, many scholars argue that the primary goal of securities regulation is investor protection. Not only does regulation prevent investors from being victimized by fraud or harmed by unsuitably risky investments, it arguably

39. Stout, *supra* note 18, at 618 n.18 (citing Joel Seligman, *The Future of the National Market System*, 10 J. CORP. L. 79 (1984)).

40. *Id.* at 619; Shannon Rose Selden, *(Self-)Policing the Market: Congress’s Flawed Approach to Securities Law Reform*, 33 J. LEGIS. 57, 65 (2006).

41. Fischel, *supra* note 14, at 912–13 (describing “trading-rule efficiency” as dependent “on the speed with which market prices reflect publicly-available information and whether the price reaction to new information is without bias”); Newkirk, *supra* note 14, at 1394 (explaining that an information efficient market “is simply one which quickly incorporates new information into a security’s price”); Stout, *supra* note 18, at 619 (explaining that the efficiency postulated by the ECMH is informational efficiency).

42. Fischel, *supra* note 14, at 914–15; Fox et al., *supra* note 13, at 349; Robert L. Knauss, *A Reappraisal of the Role of Disclosure*, 62 MICH. L. REV. 607, 610 (1964); Selden, *supra* note 40, at 65. *But see* Stout, *supra* note 18, at 697 (arguing that even informationally efficient markets may result in stock prices that do not reflect intrinsic value).

43. Newkirk, *supra* note 14, at 1394 (explaining that a “value efficient market . . . sets the price for a security at its ‘true’ worth”).

44. *See* Goshen & Parchomovsky, *supra* note 29, at 711 (“This Article posits that the essential role of securities regulation is to create a competitive market for sophisticated professional investors and analysts (information traders).”).

45. Coffee, Jr., *supra* note 15, at 728–29.

46. *Id.* at 724 (“[M]ost accounts explaining the stock market’s efficiency assign a substantial responsibility to the competition among analysts for securities information.”); Goshen & Parchomovsky, *supra* note 29, at 715–16 (“[B]y protecting information traders, securities regulation represents the highest form of market integrity, which ensures accurate pricing and superior liquidity to all investors.”).

encourages investors to purchase securities in the first place, leading to a more robust capital market.⁴⁷ Some critics of the investor protection rationale, like Professors Goshen and Parchomovsky, disparage this goal as naïve, noting, “[a]ny serious examination of the role and function of securities regulation must sidestep the widespread, yet misguided, belief that securities regulation aims at protecting the common investor.”⁴⁸ Unlike these critics of the investor protection goal, I do not discount the importance of investor protection. Rather, as discussed above, I contend that the best way to protect investors is to achieve price accuracy.⁴⁹

Finally, some scholars posit that reducing agency costs is the primary goal of securities regulation. For example, Paul G. Mahoney argues: “[T]he principal purpose of mandatory disclosure is to address certain agency problems that arise between corporate promoters and investors, and between corporate managers and shareholders.”⁵⁰ Again, I do not disagree that reduction of agency costs is important, but it is doubly interrelated with price accuracy. First, as recognized by Donald C. Langevoort, the risk of agency costs is a component of share valuation because a “valuation decision is impossible without an assessment of the risk that incumbent management will divert to itself the otherwise expected stream of earnings.”⁵¹ Second, as discussed above,⁵² accurate share prices help reduce agency costs.⁵³ Thus, price accuracy is both inseparable from agency costs and a means of reducing those costs.

Therefore, I contend that price accuracy is the primary goal of the regulation of offerings, mandatory disclosure, and public company liability. It promotes allocative efficiency, protects investors, reduces the likelihood of market crashes, and reduces agency costs. Market efficiency and securities analysis are means of achieving price accuracy; therefore, while these are important components of securities regulation, their importance derives from their effect on price accuracy. With the goal of price accuracy in mind, I will

47. Choi, *supra* note 25, at 280.

48. Goshen & Parchomovsky, *supra* note 29, at 713.

49. See *supra* notes 23–30 and accompanying text.

50. Paul G. Mahoney, *Mandatory Disclosure as a Solution to Agency Problems*, 62 U. CHI. L. REV. 1047, 1048 (1995); see also Coffee, Jr., *supra* note 15, at 752 (explaining that even “diversified investors benefit” from reduced agency costs because those costs are “an element of systemic risk that portfolio diversification cannot itself eliminate”).

51. Donald C. Langevoort, *Managing the “Expectations Gap” in Investor Protection: The SEC and the Post-Enron Reform Agenda*, 48 VILL. L. REV. 1139, 1152–53 (2003) [hereinafter Langevoort, *Managing*]; see also Merritt B. Fox, *Retaining Mandatory Securities Disclosure: Why Issuer Choice Is Not Investor Empowerment*, 85 VA. L. REV. 1335, 1365 (1999) (explaining that, if the market expects management to act in shareholders’ best interest, it translates into a higher market price); Oesterle, *supra* note 4, at 205 (explaining that, if investors are concerned about fraud, they will respond by discounting the price they are willing to pay).

52. See *supra* notes 34–36 and accompanying text.

53. See Guttentag, *supra* note 2, at 162; Palmiter, *supra* note 36, at 28.

now apply the glass-half-empty approach to three fundamental areas of securities regulation: (1) regulation of offerings; (2) mandatory disclosure by public companies; and (3) public company liability for misrepresentations and omissions.

III. REGULATION OF OFFERINGS

In this Part, I apply the glass-half-empty approach to the regulation of offerings. First, I define the hypothetical state of “full” regulation. Second, I propose a methodology to remove regulation from that hypothetical state. Finally, I apply the methodology to four categories of offerings, arguing that the glass-half-empty approach supports the current regulation of offerings, except in the context of private offerings to unsophisticated investors.

A. Definition of “Full” Regulation of Offerings

The first step of the glass-half-empty approach is to hypothesize “full” regulation of offerings. I contend that full regulation of offerings would impose mandatory disclosure and federal merit review on all offerings. In order to envision this regulatory scheme, it is helpful to revisit the fork in the road that Congress faced when enacting the Securities Act of 1933. Congress was confronted with a “battle of the philosophies” between a disclosure-based system and a merit-based system.⁵⁴ The original draft of the Securities Act adopted a merit-based system, similar to most of the blue sky laws then on the books.⁵⁵ In a message to Congress, however, President Franklin D. Roosevelt rejected that approach in favor of a disclosure-based system.⁵⁶ Ultimately, Congress chose to regulate securities offerings via disclosure without any merit review.⁵⁷ Although that choice was criticized at the time, including by future Supreme Court Justice William O. Douglas,⁵⁸ the choice has permeated modern notions of securities regulation. Indeed, the SEC has described disclosure as the “keystone of the entire structure of Federal securities

54. 1 LOUIS LOSS ET AL., *SECURITIES REGULATION* 257–325 (4th ed. 2006) (describing the “battle of the philosophies” between a disclosure-based system and a merit-based system).

55. Morrissey, *supra* note 26, at 679.

56. FEDERAL SUPERVISION OF TRAFFIC IN INVESTMENT SECURITIES IN INTERSTATE COMMERCE, H.R. REP. NO. 73-85, at 1–2 (1933) (quoting President Franklin D. Roosevelt as saying, “[o]f course, the Federal Government cannot and should not take any action which might be construed as approving or guaranteeing that newly issued securities are sound in the sense that their value will be maintained or that the properties they represent will earn profit”).

57. Manning Gilbert Warren III, *Reflections on Dual Regulation of Securities: A Case Against Preemption*, 25 B.C. L. REV. 495, 528 (1984).

58. William O. Douglas, *Protecting the Investor*, 23 YALE L. REV. 522, 528 (1934) (“This is no more and no less than an indication of the futility of placing hope for substantial progress merely on the truth about securities. Real protection must rest on broader bases.”).

legislation.”⁵⁹ As a consequence, the potential for federal merit review has received little scholarly attention.⁶⁰ A hypothetical state of full regulation would return to that fork in the road and take both paths: imposing mandatory disclosure and federal merit review.

Both mandatory disclosure and merit review are attempts to achieve price accuracy, but via a different intermediary.⁶¹ Mandatory disclosure theoretically achieves price accuracy with the market serving as intermediary. Companies are required to disclose “items indispensable to any accurate judgment upon the value of the security.”⁶² Sophisticated investors trade on the basis of the disclosed information.⁶³ Assuming that there are a sufficient number of sophisticated investors trading in a liquid market, the market price theoretically reflects their combined assessment of the value of the security,⁶⁴ approximating price accuracy.⁶⁵ Price accuracy will be diminished, however, if there are too many unsophisticated traders, whose “speculative noise” cannot be fully counteracted by the sophisticated traders,⁶⁶ or if the underlying information is so complex that even sophisticated investors cannot fully incorporate that information into their trades.⁶⁷

Merit review, on the other hand, interposes a regulator as intermediary. The regulator has the power to prevent an offering altogether⁶⁸ or to require changes in the structure before the offering can proceed.⁶⁹ A regulator performing merit review typically analyzes whether an offering is “fair, just, and

59. SEC. & EXCH. COMM’N, REPORT OF THE SPECIAL STUDY OF SECURITIES, H.R. DOC. NO. 88-95, pt. 3, at 1 (1st Sess. 1963).

60. Steven L. Schwarcz, *Rethinking the Disclosure Paradigm in a World of Complexity*, 2004 U. ILL. L. REV. 1, 26–27 (“There is little current literature on government certification of securities quality because, until recently, disclosure was seen as the complete answer.”). *But see* Morrissey, *supra* note 26.

61. Colombo, *supra* note 32, at 7 (“The difference being is that the disclosure approach allows investors and the market to determine whether a given offering is fair or excessively risky, whereas it is a government official who makes that determination in merit regulation.”).

62. H.R. REP. NO. 73-85, at 3–4.

63. Schwarcz, *supra* note 60, at 17–18.

64. Douglas, *supra* note 58, at 524; Selden, *supra* note 40, at 64–65; *see also* Fox et al., *supra* note 13, at 368 (studying the impact of management discussion and analysis (“MD&A”) disclosure and concluding that the data “suggests that share prices did in fact become more informed as a result of the enhanced MD&A requirements”).

65. *See supra* text accompanying notes 40–43.

66. Fox et al., *supra* note 13, at 348–49.

67. Schwarcz, *supra* note 60, at 36 (arguing that the “complexity of structured transactions undermines the long-held disclosure paradigm”).

68. Mark A. Sargent, *Report on State Merit Regulation of Securities Offerings*, 41 BUS. LAW. 785, 805 (1986).

69. Roberta S. Karmel, *Blue-Sky Merit Regulation: Benefit to Investors or Burden on Commerce?*, 53 BROOK. L. REV. 105, 116 (1987).

equitable,”⁷⁰ with the offering price as a key component of that analysis.⁷¹ Merit review of price aligns “as effectively as possible[,] the risk level and the initial offering price of a given issue.”⁷² The standards for assessing price include “setting the offering price as a multiple of the company’s book value, or comparing the multiple of the offering price to earnings to that of similar public companies.”⁷³ Therefore, like disclosures into an efficient market, merit review of offering price arguably enhances price accuracy by aligning the offering price with intrinsic value.⁷⁴

B. Methodology for Removing Offering Regulation

The second step of the glass-half-empty approach is to develop a methodology for removing regulation from the hypothetical “full” regulation of offerings (in other words, mandatory disclosure and federal merit review). Mandatory disclosure can exist without merit review, as under the current federal scheme. Merit review cannot exist without disclosure, however, because no merit assessment can proceed without information about a business’s fundamentals.⁷⁵ Therefore, the methodology for removing regulation from the hypothetical state of full regulation should focus on whether it is appropriate to remove merit review. If the marginal social costs of merit review, on top of mandatory disclosure, exceed the marginal social benefits, merit review should be stripped away.⁷⁶

Some evidence suggests that merit review, in practice, helps achieve price accuracy. The data on the impact of merit review is sparse, however,

70. Sargent, *supra* note 68, at 803.

71. *Id.* at 824 (“First is a concern that the offering price be fair. This concern is reflected most obviously in the limits on the price-earnings multiple and on the degree of dilution to the public investor. It is also reflected, however, in the merit concern with cheap stock.”).

72. Jay T. Brandi, *The Silver Lining in Blue Sky Laws: The Effects of Merit Regulation on Common Stock Returns and Market Efficiency*, 12 J. CORP. L. 713, 728 (1987).

73. Karmel, *supra* note 69, at 116; *see also* Rutheford B. Campbell, Jr., *An Open Attack on the Nonsense of Blue Sky Regulation*, 10 J. CORP. L. 553, 563–64 (1985); Sargent, *supra* note 68, at 811–12.

74. Brandi, *supra* note 72, at 728–29 (“As merit stringency increases, the market price of a given issue should be aligned more closely with the true intrinsic price on the first day of offering.”); *see also* Sargent, *supra* note 68, at 824 (discussing the rationales for merit review generally and stating, “[f]airness to the investor, therefore, demands that the regulator adjust the offering price so that the security is more likely to be worth what the investor pays for it”).

75. Karmel, *supra* note 69, at 116 (recognizing that “merit regulation is not necessarily antithetical to disclosure regulation”); Sargent, *supra* note 68, at 801 (emphasizing that “jurisdictions with merit authority also have the authority to review the adequacy of disclosure”).

76. *See* Karmel, *supra* note 69, at 106 (“Merit regulation clearly imposes burdens on capital formation. The question is whether the costs added to the underwriting process by [merit review] compliance outweigh whatever benefits [merit review] laws provide to investors or the securities markets.”).

because not all states have merit review statutes⁷⁷ and, since 1996, state regulation of most securities offerings has been preempted.⁷⁸ Nevertheless, in 1987, Professor Brandi studied the effects of state merit regulation on initial public offerings of common stock and found that “[t]he issues complying with the least stringent merit regulations come to market with prices which require more market adjustment than those issues from strong merit states.”⁷⁹ This relationship between more stringent merit review and post-issuance market price adjustment has two possible—perhaps interrelated—explanations. First, merit review possibly resulted in a more accurate offering price, thus requiring less price adjustment. Second, as recognized by Professor Brandi, “the relationship between necessary market price adjustment and the degree of merit regulation perhaps implies that the level to which an issue complies is, or can be, viewed as important information by the investing public.”⁸⁰ In other words, regardless of whether the offering price was actually more accurate, the investing public may have viewed it as such.

At the same time, merit review imposes substantial costs. Merit review erects an additional barrier for issuers seeking to raise capital: “Not only must securities issuers convince the capital markets of their offering’s worthiness, but they have the added hurdle (and costs) of having to convince a regulator as well.”⁸¹ That barrier slows down the issuance of securities⁸² and imposes additional expenses, both on the issuer and the regulator.⁸³ The regulator must possess sophisticated technical expertise in order to engage in merit review,⁸⁴ and there is the ever-present risk of regulator corruption or bias.⁸⁵ To the extent that private-sector analysts would potentially cover the security, it is questionable whether the regulator would perform this function better.⁸⁶

77. For example, the North American Securities Administrators Association (“NASAA”) has identified twenty-seven states and Puerto Rico as jurisdictions with merit review statutes. *See State Filing Requirements: Filing Fees and State Contact Information*, N. AM. SEC. ADM’RS ASS’N, <http://www.nasaa.org/industry-resources/corporation-finance/coordinated-review/regulation-a-of-filings/state-filing-requirements/> (last visited Dec. 15, 2016) (performing a multi-state survey that excluded Georgia, Tennessee, Wyoming, and Vermont). The NASAA also notes that New Jersey is a “quasi-disclosure” jurisdiction and that its securities regulator makes merit comments in addition to disclosure-related comments. *New Jersey*, N. AM. SEC. ADM’RS ASS’N, <http://www.nasaa.org/industry-resources/corporation-finance/coordinated-review/regulation-a-of-filings/state-filing-requirements/new-jersey/> (last visited Dec. 15, 2016).

78. 15 U.S.C. § 77r (2012).

79. Brandi, *supra* note 72, at 734.

80. *Id.*

81. Colombo, *supra* note 32, at 8.

82. Sargent, *supra* note 68, at 802.

83. Douglas, *supra* note 58, at 532 (arguing that a governmental agency engaged in merit review “would transcend in size and complexity any which we have known to date”); Knauss, *supra* note 42, at 615; Schwarcz, *supra* note 60, at 26.

84. Sargent, *supra* note 68, at 831 (arguing that merit regulation “requires a staff of persons who are both gifted financial analysts and ethical philosophers”).

85. Colombo, *supra* note 32, at 8.

86. Schwarcz, *supra* note 60, at 27.

Moreover, there is a risk that the presence of a government regulator would “actually undermine the market for private securities analysts.”⁸⁷ Further, start-up businesses and companies with new technologies or business models may have difficulty passing merit review,⁸⁸ which might ultimately serve as a disincentive to innovation.⁸⁹ Finally, although more of a philosophical cost than an actual cost, many scholars argue that merit review is unduly paternalistic,⁹⁰ and even “inconsistent with the very essence of a capitalistic system.”⁹¹

When considering whether to remove merit review of offerings from the hypothetical state of full regulation, one must weigh the likely marginal social benefits of merit review against its marginal social costs. If disclosure alone is sufficient to achieve substantial price accuracy, merit review is not warranted in light of the additional costs that it imposes. This analysis depends on how effective disclosure alone is in achieving price accuracy. As discussed above,⁹² the efficacy of disclosure depends on whether there is an intermediary—such as the market—that operates to reflect the disclosed information in the price.⁹³

Therefore, in order to analyze whether to remove merit review from an offering, one must ask whether disclosure is sufficient to achieve price accuracy. Several scholars have posed similar questions. For example, Joan MacLeod Heminway asks: “What are the limits, in particular, of disclosure regulation as a vehicle for protecting investors and markets? Do we need more substantive regulation?”⁹⁴ Similarly, Steven L. Schwarcz recommends that scholars “consider whether disclosure can be buttressed by cost-effective, supplemental protections that minimize that asymmetry or mitigate its consequences. In this context, it should be emphasized that any such supplemental protections would be *in addition to*, not in place of, disclosure.”⁹⁵ If disclosure is sufficient to achieve price accuracy, then merit review should be stripped away. If disclosure is insufficient, however, then there may be a role for merit review if the marginal social costs would not exceed the marginal social benefits.

87. *Id.* at 27–28.

88. Karmel, *supra* note 69, at 116; Sargent, *supra* note 68, at 843.

89. Campbell, *supra* note 73, at 566.

90. *Id.* at 565; Colombo, *supra* note 32, at 5; Karmel, *supra* note 69, at 116.

91. Campbell, *supra* note 73, at 566.

92. *See supra* text accompanying notes 61–67.

93. *See* Douglas, *supra* note 58, at 524.

94. Joan MacLeod Heminway, *The Best of Times, the Worst of Times: Securities Regulation Scholarship and Teaching in the Global Financial Crisis*, 5 J. BUS. & TECH. L. 59, 67 (2010).

95. Schwarcz, *supra* note 60, at 23–24.

C. *Application of Methodology for Removing Offering Regulation*

Applying this methodology to the hypothetical state of full regulation, one must first consider whether disclosure alone is sufficient to achieve substantial price accuracy. If so, then the marginal social costs of an additional overlay of merit review almost certainly exceed the marginal benefits. If disclosure is not sufficient to approximate price accuracy, however, then merit review might serve a valuable function. For purposes of this analysis, I will focus on four categories of offerings: (1) follow-on and Private Investment in Public Equity (“PIPE”) offerings by public companies; (2) initial public offerings; (3) private (non-PIPE) offerings to sophisticated investors; and (4) private offerings to unsophisticated investors.

1. *Follow-On and PIPE Offerings by Public Companies*

When a public company makes a follow-on offering or a PIPE offering, there is a pre-existing market price that serves as a reference point against which to price the securities. Because of dilution, the offering might be priced below the prevailing market price, but the market price sets the price ceiling.⁹⁶ In addition, in a PIPE offering, the market price will likely be discounted because of restrictions on resale.⁹⁷ In this context, assuming that the market operates somewhat efficiently, the preconditions for mandatory disclosure to approximate price accuracy are present.⁹⁸ Merit review in this context would be superfluous,⁹⁹ so its marginal costs would undoubtedly outweigh its marginal benefits. Therefore, consistent with current law, follow-on and PIPE offerings by public companies should not be subject to merit review.

2. *Initial Public Offerings*

By contrast, when a company makes an initial public offering, there is not an existing public market to translate disclosures into price accuracy. As explained by Professor Stout, “[i]n contrast to the case of a seasoned issue, the underwriter for an initial public offering (IPO) must set a price at a time when, by definition, no public market for that particular stock exists.”¹⁰⁰ Therefore, unless another mechanism exists in the context of IPOs to translate disclosure into price accuracy, disclosure alone is arguably insufficient to achieve price accuracy.

96. Stout, *supra* note 18, at 653–54; *Pipe Offerings*, SEC. & EXCH. COMM’N, <https://www.sec.gov/answers/pipeofferings.htm> (last updated May 19, 2005).

97. ANNA T. PINEDO & JAMES R. TANENBAUM MORRISON & FOERSTER, LLP, FREQUENTLY ASKED QUESTIONS ABOUT PIPES 7 (2016), <http://media.mofo.com/files/Uploads/Images/FAQs/PIPEs.pdf>.

98. Selden, *supra* note 40, at 64–65.

99. Sargent, *supra* note 68, at 850.

100. Stout, *supra* note 18, at 654.

I argue that the IPO price-setting process involves both intermediaries with sufficient incentives to align pricing with fundamentals and investors with sufficient sophistication to demand such alignment. As a result, disclosure is sufficient to achieve some degree of price accuracy. First, underwriters, who are repeat players in the market, have a reputational incentive to perform fundamental analysis¹⁰¹ in order to price issues accurately.¹⁰² Indeed, the SEC has acknowledged the important role of underwriters, in the exercise of due diligence, in ensuring that the offer price reflects the security's value.¹⁰³ Likewise, institutional investors, who are allocated most IPO shares,¹⁰⁴ are sufficiently sophisticated to perform their own fundamental analyses. Therefore, the bookbuilding process, whereby the underwriter sets the offer price based on investors' indications of interest,¹⁰⁵ ensures that the issue price is reflective of fundamentals.¹⁰⁶ In other words, as stated by Alan R. Palmiter, "market intermediaries do the dirty work for public investors to ensure a modicum of price fairness."¹⁰⁷

Of course, IPO pricing does not achieve perfect price accuracy. As has been well-documented,¹⁰⁸ underwriters often price securities lower than what the market would bear—a phenomenon known as "IPO underpricing." Underwriters have several incentives to underprice. First, underwriters maximize their own compensation by ensuring that all of the shares sell, causing

101. Newkirk, *supra* note 14, at 1413 (explaining that "[t]he underwriter will typically analyze the price to earning ratios of similar companies, the issuer's expected growth, the risks of the business, managerial strength, and existing market conditions"); Palmiter, *supra* note 12, at 373 (discussing how pricing between the underwriter and the issuer uses "various valuation models, multiples and comparables and indications of market demand").

102. Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, 620 (1984) (explaining that the underwriter "represents to the market . . . that it has evaluated the issuer's product and good faith and that it is prepared to stake its reputation on the value of the innovation").

103. SEC Hot Issues: Meaningful Disclosure, 37 Fed. Reg. 16,005, 16,006 (Aug. 8, 1972) (codified at 17 C.F.R. pts. 230, 239, 240, 249).

104. *E.g.*, Christine Hurt, *Moral Hazard and the Initial Public Offering*, 26 CARDOZO L. REV. 711, 712–13 (2005) (explaining that, during the 1999–2000 period in which there was high demand for IPO shares, "underwriters allocated the majority of IPO shares to regular customers, mostly institutional investors"); Laurie Krigman & Wendy Jeffus, *IPO Pricing as a Function of Your Investment Banks' Past Mistakes: The Case of Facebook*, 38 J. CORP. FIN. 335, 336 (2016) (explaining that seventy-four percent of Facebook's IPO shares were sold to institutional investors).

105. Christine Hurt, *Initial Public Offerings and the Failed Promise of Disintermediation*, 2 ENTREPRENEURIAL BUS. L.J. 703, 724 (2008) (explaining that, based on investors' indications of interest, "the underwriter sets the price for the original IPO shares, determines which road show attendees will receive shares at the original IPO price, and determines the number of shares each attendee will receive").

106. Newkirk, *supra* note 14, at 1412 (arguing that "the IPO market satisfactorily approximates the assumptions of the ECMH, ensuring that the market is sufficiently information efficient to generate reliable prices").

107. Palmiter, *supra* note 12, at 383.

108. Stout, *supra* note 18, at 657 ("Empirical studies confirm that underwriters systematically fail to set offering prices which conform to eventual equilibrium market-clearing prices.").

them to “err on the side of underpricing.”¹⁰⁹ Second, underwriters may be motivated to foster additional investment banking or brokerage business by allocating shares to institutional investors at below-market prices,¹¹⁰ allowing those investors to reap immediate profits upon resale to retail investors.¹¹¹ Relatedly, a recent study by Laurie Krigman and Wendy Jeffus of underwriters involved in the Facebook IPO suggests that underwriters may view IPOs in the aggregate, underpricing a particular issue to compensate their institutional client base for other previous issues that failed to provide those clients with an instant profit.¹¹²

Despite the failure of IPO pricing to translate disclosures into perfect price accuracy, merit review is not warranted in this context because of the high costs of merit review and the likely minimal impact that such review would have on IPO pricing. Therefore, consistent with current law, merit review should be stripped away from the hypothetical state of full regulation, leaving behind mandatory disclosure.

3. *Private (non-PIPE) Offerings to Sophisticated Investors*

Like IPOs, private (non-PIPE) offerings to sophisticated investors are not priced in relation to a prevailing market price because no such market exists.¹¹³ Therefore, unless another mechanism exists to translate disclosure into price accuracy, disclosure alone is arguably insufficient to achieve price accuracy. In these offerings, unlike in the context of IPOs, there is not necessarily an intermediary to ensure price accuracy. Often, investors “must fend for themselves in deciding whether the price of the offered securities is a fair one.”¹¹⁴ Therefore, the question of whether merit review should be removed from the hypothetical state of full regulation in this context depends on whether these sophisticated investors translate disclosure into price accuracy.

Notably, I am not using the term “sophisticated” interchangeably with the term “accredited” in this analysis. Under current law, most exemptions from registration divide investors into two categories: “accredited” and “non-accredited.”¹¹⁵ Most institutional investors, consistent with their sophistication, qualify as accredited.¹¹⁶ Individual investors, however, are classified as

109. *Id.* at 660.

110. Hurt, *supra* note 104, at 719; Krigman & Jeffus, *supra* note 104, at 336.

111. Hurt, *supra* note 105, at 724.

112. *See generally* Krigman & Jeffus, *supra* note 104. The authors argued that “[t]he pricing behavior of the Facebook lead underwriters following the Facebook IPO suggests that banks actively manage the aggregate underpricing of IPOs over time as a means of maintaining a coalition of IPO investors.” *Id.*

113. *See* Fischel, *supra* note 14, at 912.

114. Palmiter, *supra* note 12, at 385.

115. *E.g.*, 17 C.F.R. § 230.506 (2016).

116. *Id.* § 230.501(a).

accredited merely by virtue of satisfying (relatively modest) income and wealth standards.¹¹⁷ I do not equate individual wealth with sophistication.¹¹⁸ Rather, if an individual investor satisfies the accredited investor standard, but does not possess financial sophistication or have a designated financial advisor with such acumen, I classify that investor as “unsophisticated.” Conversely, in the less likely scenario in which an individual investor fails to satisfy the accredited investor standard but is financially sophisticated, I classify that investor as “sophisticated.” Indeed, in a recent report on the accreditation standard, the SEC recognized that accreditation is not a proxy for sophistication: “[T]he fact that an individual has a high net worth does not necessarily mean the individual is financially sophisticated, while a personal finance expert without requisite levels of income or net worth is not an accredited investor under the current definition.”¹¹⁹ The SEC has also identified a series of criteria that could be used to identify sophisticated individual investors, including prior investment experience, professional credentials, and passage of an examination.¹²⁰ To date, these proposed criteria have not been incorporated into the accredited investor definition, but the list provides guidance on how regulators and issuers could differentiate between unsophisticated and sophisticated individual investors regardless of accreditation.

I argue that sophisticated investors are able to exact and analyze disclosures in order to ensure some degree of price accuracy for two reasons. First, these investors routinely negotiate for extensive disclosures, often beyond those that would be required in a registration statement.¹²¹ Second, these investors possess the financial acumen to analyze those disclosures and negotiate for a price supported by pricing models.¹²² Therefore, in this context, merit review would be largely superfluous and its costs would likely outweigh its benefits.¹²³ As explained by Professor Colombo, in the context of sophisticated investors, “[i]t seems like folly, therefore, to allow a regulator

117. *Id.* § 230.501(a)(5) to (6).

118. Jennifer J. Johnson, *Private Placements: A Regulatory Black Hole*, 35 DEL. J. CORP. L. 151, 198 (2010) (discussing the disconnect between the accredited investor standard and the ability of those investors to protect themselves); Donald C. Langevoort, *Angels on the Internet: The Elusive Promise of “Technological Disintermediation” for Unregistered Offerings of Securities*, 2 J. SMALL & EMERGING BUS. L. 1, 22 (1998) [hereinafter Langevoort, *Angels*] (raising the concern that an investor’s high wealth or income does not necessarily translate into the ability to exercise “effective analytical judgment or bargaining power in direct offerings”).

119. SEC. & EXCH. COMM’N, REPORT ON THE REVIEW OF THE DEFINITION OF “ACCREDITED INVESTOR” 89 (2015).

120. *Id.* at 93–96.

121. Jennifer S. Fan, *Regulating Unicorns: Disclosure and the New Private Economy*, 57 B.C. L. REV. 583, 594 (2016); Palmiter, *supra* note 36 at 21.

122. Johnson, *supra* note 118, at 191; Palmiter, *supra* note 12, at 373.

123. See Karmel, *supra* note 69, at 119 (explaining that, in light of “the institutionalization of the securities markets,” the SEC has shifted its policy away from “consumer-oriented investor protection”).

to dictate what offerings an investor can or cannot partake in from some consumer-protection rationale focused on fairness and appropriate risk.”¹²⁴ Indeed, even states with merit review statutes exclude offerings made to certain classes of sophisticated investors.¹²⁵ Therefore, consistent with current law, merit review should be removed from the hypothetical state of “full” regulation in the context of private offerings to sophisticated investors.

4. *Private Offerings to Unsophisticated Investors*

Private offerings to unsophisticated investors are not priced in relation to a prevailing market price because no such market exists.¹²⁶ Further, there is not likely to be an intermediary with the incentive to ensure price accuracy.¹²⁷ The question of whether merit review should be removed from the hypothetical state of full regulation in this context depends on whether, like sophisticated investors, unsophisticated investors are able to “fend for themselves,”¹²⁸ both by demanding disclosure and by translating such disclosure into an accurate price.

I argue that, unlike sophisticated investors, unsophisticated investors cannot be expected to exact and analyze disclosures to ensure some degree of price accuracy. First, these investors may not recognize the need for disclosures or have the leverage to demand additional disclosures.¹²⁹ Second, these investors may not even read the disclosures.¹³⁰ Third, even if these investors read the disclosures, they are unlikely to be able to use those disclosures to value the company.¹³¹ Fourth, these investors may be especially susceptible to speculative fervor.¹³² Finally, and somewhat ironically, the businesses that offer securities to unsophisticated investors are among the

124. Colombo, *supra* note 32, at 8.

125. Warren, *supra* note 57, at 530.

126. See Fischel, *supra* note 14, at 912.

127. Palmiter, *supra* note 36, at 31 (noting that small offerings to unsophisticated investors are “the least likely to be well intermediated”).

128. Palmiter, *supra* note 12, at 385.

129. See *infra* text accompanying notes 136–137.

130. Geoffrey Rapp, *Rewiring the DNA of Securities Fraud Litigation: Amgen’s Missed Opportunity*, 44 LOY. U. CHI. L.J. 1475, 1482–83 (2013) (noting that when an average investor is given disclosure documents, “she throws them in the trash”).

131. Colombo, *supra* note 32, at 5 (“[The critics of the disclosure approach] question whether investors, even if armed with all necessary and relevant information, will make investment decisions that are sound and reasonable.”); Morrissey, *supra* note 26, at 684 (explaining that when investors do read disclosure documents, they do not understand them); Sargent, *supra* note 68, at 830 (summarizing the argument that disclosure, even if read, “is either incomprehensible or has little effect on the investment decision”).

132. Sargent, *supra* note 68, at 824 (summarizing the argument that “public investors are induced to purchase at unfair prices by market forces beyond their control, such as hot-issue expectations, pressure sales by brokers, and year-end tax-shelter fever”).

riskiest¹³³ and the most likely to involve outright fraud.¹³⁴ Therefore, I argue that the disclosure regime is insufficient to achieve even an approximation of price accuracy in private offerings to unsophisticated investors.

As such, when issuers make private offerings to unsophisticated investors, the marginal social costs of merit regulation arguably would not exceed the marginal social benefits. On the benefit side, the SEC as merit regulator would serve as an intermediary to ensure some degree of price accuracy. As Professor Langevoort has recognized, absent intermediation, “we might need some alternative strategy (for example, greater SEC or Blue Sky Law supervision) to offset it.”¹³⁵ Merit review could serve as that alternative strategy. On the cost side, merit review would impose an additional barrier on the issuer, delaying the offering and imposing costs associated with the merit review. However, issuers could avoid this delay and expense by limiting their offering to sophisticated investors. The SEC review process would also impose costs on the SEC, but again, this review would only apply to private offerings to unsophisticated investors, not all offerings. Additionally, the concern about supplanting private analysts would not be implicated in this context because analysts do not cover these types of offerings anyway. Finally, by recruiting staff with experience advising start-up companies, the SEC could develop the expertise to ensure that the merit review process does not discriminate against companies with new technologies or business models. On balance, I argue that the marginal costs of merit review would not exceed the marginal benefits and that it should not be stripped away from the hypothetical full regulation of private offerings to unsophisticated investors.

My proposed change to the current regulation of private offerings to unsophisticated investors—drawn from a glass-half-empty analysis of securities regulation—is comparable to other scholars’ proposed reforms to the regulation of offerings. For the reasons explained below, however, I contend that imposing both mandatory disclosure and SEC merit review of private offerings to unsophisticated investors is more fine-tuned to the problem of achieving price accuracy in these offerings than other scholars’ proposals, which were drawn from a glass-half-full approach.

First, several scholars have argued that there should be enhanced disclosures to unsophisticated investors in exempt offerings rather than merit review of those offerings. For example, Professor Palmiter argues that, because of the lack of intermediation and other protections for investors in the context

133. Johnson, *supra* note 118, at 196; Choi, *supra* note 25, at 308.

134. Johnson, *supra* note 118, at 188 (explaining that a Rule 506 offering has become “a favorite vehicle for fraudulent transactions”); Langevoort, *Angels*, *supra* note 118, at 2 (pointing out that the concentration of investment fraud in new ventures is a “strong counterweight to the deregulatory impulse”).

135. Langevoort, *Angels*, *supra* note 118, at 20–21.

of the crowdfunding exemption, investors should receive enhanced price disclosure.¹³⁶ Similarly, in the context of private offerings by “unicorns”—private companies with valuations of at least one billion dollars¹³⁷—Jennifer S. Fan has argued that certain financial disclosures, which are generally only available to major investors, should be posted on the unicorn’s website.¹³⁸ The problem with these scholars’ proposed solution is that it continues to rely on disclosure,¹³⁹ which neglects the reality that unsophisticated investors may not read the disclosures. Even if they do read them, they are unlikely to be able to analyze them meaningfully because of a lack of financial acumen or the existence of speculative fervor. If these disclosures were made to the SEC instead, the SEC could act as an intermediary and perform merit review, focusing on price accuracy.

Second, several scholars have argued for more limited federal preemption of state review of private securities offerings to unsophisticated investors,¹⁴⁰ which would be a roundabout way of imposing merit review on these offerings. For example, Jennifer J. Johnson argues that state regulation of offerings under Rule 506(b), the most widely used exemption from registration,¹⁴¹ should be limited to offerings by or to accredited institutional investors.¹⁴² Therefore, under Professor Johnson’s proposal, “[s]ales by unregulated private entities such as limited partnerships to individual investors would be subject to state review.”¹⁴³ Like my proposal, Professor Johnson’s proposal would subject some private offerings to unsophisticated investors to merit review, but only in those states with merit review statutes.¹⁴⁴ I contend, however, that merit review would be better performed by the SEC than by the states. By centralizing merit review, the SEC could develop the expertise to perform consistent and competent merit review. States with merit review statutes vary dramatically with respect to whether they “have the practical ability to regulate,”¹⁴⁵ both with respect to funding and expertise.¹⁴⁶ Addi-

136. *See generally* Palmiter, *supra* note 12, at 411.

137. Fan, *supra* note 121, at 586.

138. *Id.* at 609.

139. *See supra* text accompanying notes 129–134.

140. *See, e.g.*, Warren, *supra* note 57, at 501.

141. SEC. & EXCH. COMM’N, *supra* note 119, at 1; U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-12-839, SECURITIES REGULATION: FACTORS THAT MAY AFFECT TRENDS IN REGULATION A OFFERINGS 18–20 (2012).

142. Johnson, *supra* note 118, at 190.

143. *Id.*

144. Sargent, *supra* note 68, at 837 (noting that “[n]ot every state is a merit jurisdiction, and not every jurisdiction with merit authority in its statute exercises that authority regularly”).

145. *Id.* at 790.

146. *Id.* at 839.

tionally, decentralized merit review performed by multiple states risks inconsistent standards.¹⁴⁷ Professor Johnson counters this concern about balkanization in multistate offerings by arguing for an at-least-one-state standard, whereby only one state agency would be required to conduct state-level review of the offering.¹⁴⁸ This solution, while elegant, would not address the disparity in funding and expertise among state regulators. Therefore, I contend that the better proposal is to impose SEC merit review of all private offerings to unsophisticated investors.

Third, Daniel J. Morrissey has argued for SEC merit review of all offerings, not merely private offerings to unsophisticated investors.¹⁴⁹ Drawing lessons from the 2008 financial crisis, he contends that the SEC should have the authority to “flat-out prohibit the sale of certain investments that pose undue risks to our entire economic system.”¹⁵⁰ Unlike my proposal, Professor Morrissey’s does not differentiate the marginal costs and benefits of merit review for different categories of offerings. His proposal would apply to follow-on and PIPE offerings by public companies, IPOs, and private offerings to sophisticated investors. As argued above,¹⁵¹ however, disclosure is sufficient in those contexts to achieve a level of price accuracy. Therefore, I conclude that my proposal is fine-tuned to those offerings where merit review’s marginal costs would not exceed its marginal benefits.

Fourth, Professor Choi has proffered a unique proposal to regulate offerings, not by issuer type, but by investor type.¹⁵² He identifies four groups of investors:

- (1) investors informed at the level of individual issuers (“issuer-level” investors);
- (2) investors without information on particular issuers but informed about a range of securities intermediaries (“intermediary-level” investors);
- (3) investors with information only on certain highly-visible market participants, including nationally known individual intermediaries (“aggregate-level” investors); and
- (4) investors without information on any securities market participants (“unsophisticated” investors).¹⁵³

Investors in the fourth group would be channeled “to intermediaries able to negotiate for desired protections.”¹⁵⁴ Like Professor Choi, I argue that unsophisticated investors should be channeled to an intermediary, but I argue that the SEC as merit regulator should be one such intermediary. Under Professor

147. *Id.* at 833.

148. Johnson, *supra* note 118, at 192–93.

149. Morrissey, *supra* note 26, at 649.

150. *Id.* at 687.

151. *See supra* notes 95–124 and accompanying text..

152. Choi, *supra* note 25, at 333–34.

153. *Id.* at 284.

154. *Id.* at 308.

Choi's proposal, "unsophisticated investors would be unable to purchase securities other than through passive index funds regardless of the passage of any holding period."¹⁵⁵ By contrast, under my proposal, unsophisticated investors would not be foreclosed from investing in a wide variety of securities, including private placements, so long as the SEC had engaged in merit review. My proposal interposes an intermediary, as suggested by Professor Choi, but also allows issuers to raise capital from unsophisticated investors and allows unsophisticated investors to invest in a wider range of opportunities. For those reasons, I contend that it is a better way of regulating offerings to unsophisticated investors.

Finally, several scholars have argued for supplementing disclosure regulation, not with merit review, but with "substantive legislation that governs corporate behavior in a much more direct manner."¹⁵⁶ This substantive regulation would mandate beneficial corporate conduct and prohibit harmful corporate conduct.¹⁵⁷ As a specific example, Professor Schwarcz argues for the prohibition of "material conflicts of interest in disclosure-impaired transactions."¹⁵⁸ As even its proponents acknowledge, however, an attempt to substantively regulate corporate conduct with specific rules is potentially under-inclusive and is often responsive to the most recent financial crisis as opposed to the next one.¹⁵⁹ My proposal would permit the SEC to more nimbly adapt its mechanisms of merit review to respond to new complexities.

* * *

The glass-half-empty approach to securities regulation of offerings confirms that the current disclosure regime is appropriate for follow-on offerings and PIPE offerings by public companies, for IPOs, and for private offerings to sophisticated investors. The half-glass-empty approach also demonstrates that, for private offerings to unsophisticated investors, disclosure alone is insufficient to achieve price accuracy. Rather, in this context, the approach demonstrates that the marginal costs of merit review would likely not exceed the marginal benefits. Further, this proposed change is more fine-tuned to the problem of achieving price accuracy in these offerings than other scholars' proposals, which were drawn from a glass-half-full approach.

155. *Id.* at 307.

156. Ripken, *supra* note 26, at 190.

157. *Id.*

158. Schwarcz, *supra* note 60, at 31–32.

159. *Id.* at 37. Professor Schwarcz has said, "I do not argue that the protection provided by this rule . . . will assure the legitimacy of the securities market. I only contend that because Enron and other recent scandals have created perceptions of distrust of the securities markets . . . it is important to inquire how to design cost-effective controls to reduce these perceptions and their underlying reality, even though the controls may be second-best." *Id.*

IV. MANDATORY DISCLOSURE BY PUBLIC COMPANIES

In this Part, I apply the glass-half-empty approach to mandatory disclosure by public companies. Just as in Part III, I define the hypothetical state of full regulation. Then, I propose a methodology to remove regulation from that hypothetical state. Finally, I apply the methodology, arguing that the results of the glass-half-empty approach support most aspects of the current mandatory disclosure regime. I argue, however, that those results recommend several discrete reforms: an adjustment to the trigger for Management Discussion and Analysis (“MD&A”) disclosure, a change to the mental state required to impose liability on an issuer, a recognition that the failure to comply with MD&A disclosure is actionable as an omission, an abolition of the safe harbor for forward-looking information, and a change to the timing of risk disclosure.

A. Definition of “Full” Disclosure

Under the glass-half-empty approach, I contend that “full” regulation of mandatory disclosure by public companies would require continuous disclosure of all information about the firm. This hypothetical state differs substantially from the current disclosure regime, which mandates certain disclosures at the time of offering,¹⁶⁰ certain disclosures quarterly¹⁶¹ and annually¹⁶² thereafter, and certain disclosures on a current basis.¹⁶³

B. Methodology to Remove Disclosure Requirements

The methodology for removing disclosure requirements from this hypothetical full state poses three analytical questions: First, why not remove all mandatory disclosure requirements? Second, assuming that disclosure should be mandated, what substance should be required to be disclosed? And finally, assuming that disclosures should be mandated and that certain substance should be required, how often should companies be required to make those disclosures?

1. Why Mandate Disclosure at All?

Firms have incentives to voluntarily disclose information at issuance and to the aftermarket. At issuance, firms recognize that, absent disclosure, investors may not invest in their securities at all or will discount those securities to take into account the lack of information.¹⁶⁴ Moreover, investors are

160. 17 C.F.R. § 239.11 (2016) (Form S-1); *id.* § 239.13 (Form S-3).

161. *Id.* § 240.13a-13 (Form 10-Q); *id.* § 240.15d-13 (same); *id.* § 249.308a (same).

162. *Id.* § 240.13a-1 (Form 10-K); *id.* § 240.15d-1 (same); *id.* § 249.310 (same).

163. *Id.* § 240.13a-11 (Form 8-K); *id.* § 240.15d-11 (same); *id.* § 249.308 (same).

164. Palmiter, *supra* note 36, at 6.

likely to value securities higher if the company commits to engage in ongoing reporting about the state of the business, both because the investors will be better able to monitor the business and because such disclosures are likely to translate into a higher aftermarket price. As explained by the Honorable Frank H. Easterbrook and Daniel R. Fischel, “[a] firm that wants the highest possible price when it issues stock must take all cost-justified steps to make the stock valuable in the aftermarket, so it must make a believable pledge to continue disclosing.”¹⁶⁵

As numerous scholars have discussed, however, there are several potential market failures in a world of voluntary disclosure, such that issuers may not have sufficient incentives to disclose the optimal amount of information—the level at which the marginal social costs of disclosure equal the marginal social benefits.¹⁶⁶ First, some of the social benefits of disclosure may not be internalized by the firm. Disclosure about one firm may provide benefits to another firm, such as by revealing industry-wide trends.¹⁶⁷ Relatedly, those disclosures might not only help the other firm, but also hurt the disclosing firm competitively.¹⁶⁸ Because the disclosing firm incurs the costs of such disclosures but does not internalize all of the benefits (which may exceed the costs), the firm may under-disclose.

Second, the divergence between management’s interest in self-preservation and society’s (including investors’) interest in disclosure of negative firm information may result in sub-optimal disclosure of negative information.¹⁶⁹ Management has a number of self-interested reasons for preferring not to disclose negative information, including compensation related to share price, retention of employment, and prevention of hostile take-overs and proxy contests.¹⁷⁰ Therefore, management has incentives to delay or prevent the disclosure of negative firm information. Although management has countervailing incentives to disclose negative information in a timely way—including “the need to establish and nurture an on-going corporate reputation for credibility to facilitate future capital-raising,” these incentives are often insufficient because of the “last period” problem.¹⁷¹ In other words, if the manager is not planning to be around to reap the benefits of the corporate reputation for credibility¹⁷² or if the company is not planning to raise more

165. Frank H. Easterbrook & Daniel R. Fischel, *Mandatory Disclosure and the Protection of Investors*, 70 VA. L. REV. 669, 684 (1984).

166. Fox, *supra* note 51, at 1344.

167. *Id.* at 1362–63; Easterbrook & Fischel, *supra* note 165, at 685.

168. Fox, *supra* note 51, at 1354 (providing examples of disclosures that could harm the issuer by conferring an advantage on competitors).

169. *Id.* at 1355–56.

170. Kahan, *supra* note 12, at 1028–29.

171. Donald C. Langevoort, *Toward More Effective Risk Disclosure for Technology-Enhanced Investing*, 75 WASH. U. L.Q. 753, 760 (1997) [hereinafter Langevoort, *Toward*].

172. Coffee, Jr., *supra* note 15, at 743.

capital,¹⁷³ there may be insufficient incentives to disclose negative firm information.

Furthermore, if a company remains silent rather than releasing negative information, shareholders cannot simply intuit that the undisclosed information is negative. First, there may be legitimate business reasons for not disclosing certain information, such as competitive reasons for not disclosing “information about a new product or a new technology.”¹⁷⁴ As explained by Professor Fox, “[s]ilence is not a complete substitute for affirmatively disclosing a lack of good news because the market knows that an issuer could choose a low-disclosure regime for reasons other than a lack of good news.”¹⁷⁵ Second, as explained by Joseph A. Franco, “[w]hen the total amount of information is undefined and open-ended, the disadvantaged party cannot readily infer that information is being concealed merely from observing the counterparty’s public disclosure.”¹⁷⁶ Finally, management may lack the incentive to disclose positive news under certain circumstances, such as when undertaking a leveraged buy-out.¹⁷⁷ This contributes to the messiness of silence as a signal, as well as depriving the market of the optimal amount of disclosure.

Even if some issuers would disclose at the optimal level under a purely voluntary regime, rendering those disclosures mandatory as opposed to voluntary would impose only slight marginal costs, if any. Indeed, some scholars have described a rule compelling disclosures that would have been made voluntarily as “redundant”¹⁷⁸ and theorized that “[t]he marginal direct cost of mandatory disclosure may be small.”¹⁷⁹ Admittedly, if a mandatory disclosure rule compelled disclosure in a format different from the one that an issuer would have chosen voluntarily, it could impose slight marginal costs of collection and disclosure.¹⁸⁰ Those slight marginal costs could be offset, however, because greater standardization can lead to issuer costs savings:

By imposing greater uniformity on disclosure requirements, mandatory disclosure is likely to lead to greater economies of scale in the design of systems for the collection of such information (such as software systems), increase the size and mobility of the pool of disclosure professionals available to issuers, and lead to greater

173. See Gilson & Kraakman, *supra* note 102, at 620.

174. Easterbrook & Fischel, *supra* note 165, at 687 (elaborating that “[b]ecause of these ‘good’ reasons for nondisclosure, investors cannot infer unambiguously that no news is bad news”).

175. Fox, *supra* note 51, at 1361.

176. Joseph A. Franco, *Why Antifraud Prohibitions Are Not Enough: The Significance of Opportunism, Candor and Signaling in the Economic Case for Mandatory Securities Disclosure*, 2002 COLUM. BUS. L. REV. 223, 264.

177. Coffee, Jr., *supra* note 15, at 743.

178. Easterbrook & Fischel, *supra* note 165, at 683.

179. *Id.* at 708; see also Langevoort, *Information Technology*, *supra* note 12, at 789.

180. Franco, *supra* note 176, at 333.

cost competition in service providers, such as independent auditors.¹⁸¹

In addition, if disclosures are mandated in a standardized format, investors' investment analysis costs are reduced.¹⁸² Finally, mandating disclosures reduces the negotiation costs between issuers and investors about the content and format of disclosure.¹⁸³ Therefore, because of the potential for market failures in a purely voluntary regime and the slight marginal costs of mandating disclosures that would have been made voluntarily, I argue that, under the glass-half-empty approach, not all mandatory disclosures can be removed from the hypothetical full state of regulation. Therefore, one must devise a methodology for identifying those disclosures that should be stripped away, based both on content and timing.

2. *Test for Disclosures to be Removed*

Turning first to the content of mandatory disclosures, I argue that disclosures should be removed from the hypothetical state of full regulation (or, a regulatory scheme in which everything must be disclosed continuously) if the marginal social costs of a particular disclosure exceed its marginal social benefits. This is essentially the converse of the test under the glass-half-full approach, which asks whether the marginal social benefits of a disclosure exceed its marginal social costs.¹⁸⁴

Calculating the marginal benefits of a particular disclosure encompasses two interrelated inquiries: (1) to what degree would price accuracy be enhanced by the disclosure; and (2) to what degree would enhanced price accuracy benefit society in this context? The first inquiry should focus on how important the particular piece of information is to an accurate valuation of the security.¹⁸⁵ The second inquiry should focus on the degree to which the aforementioned benefits of price accuracy—the efficient allocation of capital, the protection of investors, the reduced likelihood of bubbles, and the reduction of agency costs—will inure to society in the context of a particular disclosure. For example, the benefit of efficient allocation of capital is directly linked to price accuracy at the time of issuance, but only indirectly linked in the secondary market.¹⁸⁶ The benefits of a reduced likelihood of bubbles and reduction of agency costs, however, are more directly implicated by price accuracy in the secondary market than at the time of issuance. The

181. *Id.*

182. *Id.* at 296.

183. Mahoney, *supra* note 50, at 1092.

184. *E.g.*, Easterbrook & Fischel, *supra* note 165, at 696; Fox, *supra* note 51, at 1339; Kahan, *supra* note 12, at 989.

185. *See* Fox, *supra* note 51, at 1338 (linking “[m]ore information about the issuer” with “the resulting increase in its share price accuracy”).

186. Kahan, *supra* note 12, at 1013.

benefit of protection of investors is likely equally implicated at the time of issuance and in the secondary market. Therefore, I contend that the benefits of price accuracy are evenly split between the contexts of issuance and the secondary market. This contention is consistent with the SEC's policy of "equivalency," which recognizes that information necessary for investment decisions should be similar for distribution and for trading markets.¹⁸⁷ As such, when analyzing the marginal benefits of disclosure, the focus should be on the degree to which a particular disclosure would enhance price accuracy.

Calculating the marginal costs of a particular disclosure requires an assessment of both direct and indirect costs. The direct costs include the costs of compiling the information and preparing the disclosure report,¹⁸⁸ including management's time and attorneys' and accountants' fees.¹⁸⁹ The indirect costs include competitive costs due to competitors' ability to profit from the disclosure¹⁹⁰ and the lost productivity of management due to the diversion of time.¹⁹¹

The accuracy of disclosure is intertwined with this cost-benefit analysis of the content of disclosure. On the benefit side, for example, if a precise disclosure is significantly more helpful to price accuracy than an imprecise one, mandating perfectly accurate disclosure would greatly increase marginal benefits. On the other end of the spectrum, if precision is not imperative to a disclosure's bearing on price accuracy, mandating perfectly accurate disclosure would only minimally increase marginal social benefits. On the cost side, the greater the degree of accuracy mandated, the higher the marginal compliance costs (or "precaution costs").¹⁹² How the marginal costs and benefits of various degrees of accuracy balance out depends on the particular disclosure. The optimal degree of accuracy, therefore, is part and parcel of the mandatory disclosure analysis and varies by type of disclosure.

The sanction imposed for violating that optimal degree of accuracy is a separate inquiry, however. Although some scholars include liability costs for allegedly false or misleading disclosures as a cost of disclosure,¹⁹³ others ignore liability costs for purposes of identifying the optimal level of mandatory

187. Proposed Comprehensive Revision to System for Registration of Securities Offerings, 45 Fed. Reg. 63,693, 63,694 (proposed Sept. 25, 1980) (to be codified at 17 C.F.R. §§ 230, 239).

188. Easterbrook & Fischel, *supra* note 165, at 707.

189. Fox, *supra* note 51, at 1338–39; Langevoort, *Toward*, *supra* note 171, at 771; Palmiter, *supra* note 36, at 12.

190. Palmiter, *supra* note 36, at 12.

191. *Id.*

192. See Donald C. Langevoort, *Organized Illusions: A Behavioral Theory of Why Corporations Mislead Stock Market Investors (and Cause Other Social Harms)*, 146 U. PA. L. REV. 101, 128 (1997) (explaining that "senior executives cannot prevent corporate liability simply by behaving honestly as a group, but instead must implement the best available internal information-control devices to manage the liability risk").

193. See, e.g., Palmiter, *supra* note 36, at 12.

disclosure, instead treating the question of appropriate sanction as a separate analytical question, as I do.¹⁹⁴ For example, Professor Franco argues:

Strictly speaking, mandatory disclosure requirements are distinct from the imposition of liability on those who violate the requirements. Indeed, the scope and content of a particular disclosure requirement on the one hand and the optimal sanction for violation of those requirements on the other reflect very different policy considerations. Policies about disclosure content need not dictate policy with respect to liability standards.¹⁹⁵

I agree that designing the optimal disclosure regime is a separate inquiry from the system of sanctions implemented to enforce that regime. For this reason, I focus on the former in this Part, including the optimal degree of accuracy with respect to each disclosure. In the next Part, I address to the appropriate sanction for violating that optimal disclosure regime.¹⁹⁶

Turning second to the timing of mandatory disclosures, I argue that disclosures should be removed from the hypothetical state of full (or, continuous) disclosure if the marginal social costs of requiring a particular disclosure to be updated constantly, as opposed to periodically, exceed the marginal social benefits. The marginal benefits of real-time disclosure of a particular piece of information depend on (1) the degree to which the information affects price accuracy¹⁹⁷; and (2) the degree to which the information is likely to be dynamic, such that prior disclosures risk becoming stale and inaccurate.¹⁹⁸ The marginal costs of continuous, as opposed to periodic, disclosure depend on (1) the direct costs of compiling and reporting such information on a continuous basis¹⁹⁹; and (2) the indirect costs associated with instantaneous as opposed to periodic reporting, such as the marginal competitive cost associated with losing temporary secrecy.²⁰⁰ If a piece of information is unlikely to change rapidly, the marginal benefits of continuous disclosure are

194. E.g., Oesterle, *supra* note 4, at 191–94 (arguing that “it is possible to separate the substantive content of disclosure obligations from the optimal method of enforcing whatever obligations one chooses”).

195. Franco, *supra* note 176, at 336–37.

196. *See infra* Part IV.

197. Langevoort, *Information Technology*, *supra* note 12, at 791 (identifying “the significance of the information” as an important factor when analyzing whether to mandate continuous disclosure).

198. Kahan, *supra* note 12, at 999 (explaining that “the timing of inaccuracies” affects the degree of mispricing).

199. Franco, *supra* note 176, at 300 (explaining that a disadvantage of a continuous disclosure regime is that “it would potentially increase issuer disclosure costs”); Langevoort, *Toward*, *supra* note 171, at 771 (arguing that, because of the cost to issuers, there “is a good reason to be relatively conservative in the duty to update”).

200. Franco, *supra* note 176, at 301 (explaining that a continuous disclosure regime could increase the competitive costs of disclosure because “the commercial sensitivity of the information is likely to dissipate over time”).

reduced, but so are the direct costs of compiling and reporting the information. Conversely, if a piece of information is dynamic, the marginal benefits of continuous disclosure increase, but so do the marginal direct costs of making the disclosure.

C. Application of Methodology to Remove Mandatory Disclosures

Applying this methodology to remove mandatory disclosures from the hypothetical full state of regulation (or, the continuous disclosure of all information) yields interesting insights about both the content and timing of required disclosures.

1. Content of Required Disclosures

a. Materiality Standard

Mandated disclosure of certain content should be removed from the hypothetical state of full regulation if the marginal social costs of mandating a particular disclosure exceed the marginal social benefits. Under this methodology, a broad swathe of mandated disclosures should be removed from the hypothetical state of full regulation: those that do not enhance price accuracy. If the content of a particular disclosure would not contribute to the accurate valuation of a security, the marginal costs will, per se, exceed the marginal benefits of the disclosure. If a disclosure would enhance price accuracy, then the analysis should proceed to consider the marginal benefits and marginal costs of mandating the disclosure.

This provides a new perspective on the appropriateness of “materiality” as a disclosure trigger. Under current law, disclosure requirements are often triggered by a materiality threshold, such as information “material to an understanding of the general development of the business,”²⁰¹ “materially important physical properties of the registrant and its subsidiaries,”²⁰² and “material pending legal proceedings.”²⁰³ As defined by the Supreme Court, information is material if there is a substantial likelihood that a reasonable investor would consider it important in making an investment decision.²⁰⁴ In another articulation, information is material if it would be viewed by the reasonable investor as significantly altering “the ‘total mix’ of information made

201. 17 C.F.R. § 229.101(a) (2016) (Reg. S-K).

202. *Id.* § 229.102 (same).

203. *Id.* § 229.103 (same).

204. *Basic Inc. v. Levinson*, 485 U.S. 224, 232 (1987) (“We now expressly adopt the *TSC Industries* standard of materiality for the § 10(b) and Rule 10b-5 context.”); *TSC Indus., Inc. v. Northway, Inc.*, 426 U.S. 438, 449 (1976) (“An omitted fact is material if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote.”).

available.”²⁰⁵ When this materiality standard is applied to contingent or speculative information, the Court applies a probability/magnitude test, which depends “upon a balancing of both the indicated probability that the event will occur and the anticipated magnitude of the event in light of the totality of the company activity.”²⁰⁶

Applying the glass-half-empty approach, disclosures should not be mandated if they would not enhance price accuracy. This analysis mimics the materiality standard because—when making an investment decision—a reasonable investor should only consider information that aids in valuation to be important. Therefore, to the extent that immaterial information is not required to be disclosed under current law, the glass-half-empty analysis reaches the same result.

The converse is not necessarily true, however. Under the glass-half-empty approach, even if disclosures would enhance price accuracy, they should not be required if the marginal costs of disclosure exceed the marginal benefits.²⁰⁷ Therefore, disclosure of some information, even if material, may not be warranted. This suggests that the materiality trigger that applies to many disclosure requirements under current law may be over-inclusive.

b. MD&A Disclosure

Applying the glass-half-empty approach also provides new perspectives on specific disclosure requirements. For example, as part of Management Discussion & Analysis of Financial Condition and Results of Operations (“MD&A”), a public company must disclose certain trends with respect to liquidity, capital resources, or results of operations that might affect the company’s financial condition or results of operations.²⁰⁸ The purpose of this disclosure is to provide information “necessary to an understanding of [the company’s] financial condition, changes in financial condition and results of operations.”²⁰⁹

Under current law, this disclosure requirement is not triggered by the probability/magnitude materiality test.²¹⁰ Rather, a company must engage in

205. *TSC Indus., Inc.*, 426 U.S. at 449.

206. *Basic*, 485 U.S. at 238 (quoting *SEC v. Texas Gulf Sulphur Co.*, 401 F.2d 833, 849 (2d Cir. 1968)).

207. See Langevoort, *Information Technology*, *supra* note 12, at 791 (“A useful presumption might be that material information must be placed in the system within one business day of a determination of materiality. That time period could be shortened or extended depending on such factors as the significance of the information, the size of the issuer, and the difficulty of accurately formulating the disclosure standard.”).

208. 17 C.F.R. §§ 229–303(a) (2016).

209. *Id.* § 229.303(a).

210. Management’s Discussion and Analysis of Financial Condition and Results of Operations; Certain Investment Company Disclosures, 54 Fed. Reg. 22,427, 22,430 n.30 (May 18, 1989) (codified at 17 C.F.R. pts. 211, 231, 241, and 271).

a three-step analysis. Step one: is the trend “known”? If it is merely “anticipated” as opposed to known, it need not be disclosed.²¹¹ If it is known, then the company must proceed to the second step. Step two: is the trend “likely to come to fruition”?²¹² If not, no disclosure is required. If it is likely to come to fruition, the company must proceed to the third step. Step three: assuming that the trend comes to fruition, is “a material effect on the registrant’s financial condition or results of operations . . . reasonably likely to occur[?]”²¹³ If not, no disclosure is required. If so, disclosure is required.

This three-step analysis has been subject to significant criticism. First, it does not require disclosure of all contingent or speculative information that would satisfy the probability/magnitude test for materiality. If a trend is not likely to come to fruition, it need not be disclosed in the MD&A, regardless of its potential magnitude.²¹⁴ By contrast, under the probability/magnitude test, even an unlikely eventuality is material if of sufficient magnitude. Second, the complexity of the analysis has been criticized as “failing on grounds of obscurity if not misdirection”²¹⁵ and as “oxymoronic.”²¹⁶

Applying the glass-half-empty approach to MD&A, one must first define “full” disclosure of trends and uncertainties about liquidity, capital resources, and results of operations. This would require disclosure of both “known” and “anticipated” trends and uncertainties, regardless of their likelihood of coming to fruition or anticipated magnitude.

Second, one must remove disclosures that would not enhance price accuracy. The probability/magnitude test—which identifies the subset of speculative information for which there is a substantial likelihood that a reasonable investor would consider it important in making an investment decision— informs this analysis. If a trend or uncertainty fails the probability/magnitude test, it should be not mandated under the MD&A.

Third, for those trends or uncertainties that satisfy the probability/magnitude test, one must weigh the marginal costs of disclosure against the marginal benefits. On the marginal benefits side, disclosure of trends and uncertainties about liquidity, capital resources, and results of operations, to the extent they pass the probability/magnitude test, would enhance price accuracy because these topics relate directly to the company’s future cash flows. With respect to direct costs, the marginal collection costs should be minimal because anticipating these trends and uncertainties is fundamental to managing a business. Indeed, the SEC has acknowledged that “one of the principal objectives of MD&A is to give readers a view of the company through the

211. *Id.*

212. *Id.* at 22,430.

213. *Id.*

214. Mark S. Croft, *MD&A: The Tightrope of Disclosure*, 45 S.C. L. REV. 477, 483 (1994).

215. Langevoort, *Managing*, *supra* note 51, at 1155.

216. Croft, *supra* note 214, at 484.

eyes of management.”²¹⁷ The marginal indirect costs associated with diverting management’s time from other functions should likewise be minimal because it is difficult to imagine that there are significantly better uses of management’s time than anticipating these trends and uncertainties. Finally, the company may experience marginal indirect competitive costs to the extent that other companies are able to adjust their business plans in light of these disclosures, but those marginal costs are almost certainly outweighed by the marginal benefits of disclosure.

Therefore, the glass-half-empty analysis supports a revision to the MD&A disclosure standard: a trend or uncertainty with respect to liquidity, capital resources, or results of operations should be mandatorily disclosed to the extent that it passes the probability/magnitude materiality test.²¹⁸ This test also benefits from being much easier to apply than the current MD&A test, which would lower reporting costs.

c. Degree of Accuracy

The glass-half-empty analysis also lends new insights on the degree of accuracy that should be mandated for particular disclosures. Degrees of accuracy are mandated by liability standards—in particular, the duty, falsity, and mental state elements of liability.²¹⁹ A hypothetical state of full regulation would mandate completeness and accuracy with respect to each disclosure, regardless of the issuer’s degree of care. In other words, full regulation would impose strict liability on issuers for every misstatement or omission. Applying the glass-half-empty methodology, this strict liability standard of perfection should be lowered to the extent that the marginal costs achieved by this standard exceed the marginal benefits associated therewith. Therefore, the optimal liability standard should vary by type of disclosure.

This conclusion is consistent with the current public and private liability scheme’s falsity element—which premises liability on a finding that a misstatement or omission is materially misleading.²²⁰ Because materiality is directly correlated with a misstatement or omission’s relevance to price accuracy,²²¹ the degree of falsity required to trigger the materially misleading standard varies depending on the type of disclosure, requiring almost perfect

217. Commission Guidance Regarding Management’s Discussion and Analysis of Financial Condition and Results of Operations, 68 Fed. Reg. 75,056, 75,060 (Dec. 29, 2003) (codified at 17 C.F.R. pts. 211, 231 and 241).

218. See Langevoort, *Managing*, *supra* note 51, at 1155 (arguing that MD&A disclosure should be triggered by the materiality standard).

219. See Frank H. Easterbrook & Daniel R. Fischel, *Optimal Damages in Securities Cases*, 52 U. CHI. L. REV. 611, 615 (1985) (“The legal rules together tell people how much investigation to conduct, how much care to take, and when they need not disclose. Either freedom from liability or low damages in the event of liability will lead firms to conserve resources and not disclose.”).

220. *E.g.*, 15 U.S.C. § 77k(a) (2012); *id.* § 77q(a); *id.* § 78r(a).

221. See *supra* notes 200–205 and accompanying text.

accuracy for some types of disclosure and allowing for some degree of inaccuracy for other types of disclosure.²²²

This conclusion dramatically departs from the current liability scheme's mental state element, however. Under current law, the degree of care that an issuer must exercise in order to avoid liability when making a disclosure depends not on the type of disclosure, but on the context of disclosure. For example, in private litigation, despite the fact that registration statements and periodic reports contain many of the same types of disclosures, issuers are held to a strict liability standard for misrepresentations or omissions in registration statements²²³ but held to a quasi-knowledge²²⁴ or recklessness²²⁵ standard for disclosures in periodic reports. The glass-half-empty analysis demonstrates that this regime should be recalibrated based on the type of disclosure as opposed to the context of disclosure. Therefore, contrary to current law, certain issuer disclosures in registration statements should be subject to a negligence or recklessness standard,²²⁶ and certain issuer disclosures in periodic reports should be subject to a negligence or strict liability standard.²²⁷

Further, this analysis demonstrates that, contrary to current law, no mandatory disclosures should be fully insulated from liability. The marginal benefits of a wholly unreliable disclosure are non-existent, and thus the marginal costs of such a disclosure will always exceed its marginal benefits. Any man-

222. Staff Accounting Bulletin No. 99, 64 Fed. Reg. 45,150, 45,151 (Aug. 12, 1999) (explaining that, depending on the significance of the information, even a misstatement that is small in magnitude might nonetheless be material).

223. 15 U.S.C. § 77k(b) (2012) (foreclosing the due diligence defense to issuers).

224. *See id.* § 78r(a) (imposing strict liability but providing an issuer a defense to liability if it proves that it "acted in good faith and had no knowledge that such statement was false or misleading").

225. *See id.* § 78j(b); *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 319 n.3 (2007) ("We have previously reserved the question whether reckless behavior is sufficient for civil liability under § 10(b) and Rule 10b-5. Every Court of Appeals that has considered the issue has held that a plaintiff may meet the scienter requirement by showing that the defendant acted intentionally or recklessly, though the Circuits differ on the degree of recklessness required." (first citing *Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 194 n.12 (1976); then citing *Ottmann v. Hanger Orthopedic Group, Inc.*, 353 F.3d 338, 343 (4th Cir. 2013))).

226. *See* Donald C. Langevoort, *Capping Damages for Open-Market Securities Fraud*, 38 ARIZ. L. REV. 639, 663 (1996) [hereinafter Langevoort, *Capping*] (debating whether strict liability is the best standard to impose on issuers under the Securities Act).

227. *See* Rapp, *supra* note 130, at 1489 (proposing that courts allow, under some circumstances, securities misstatement claims to be brought through strict liability).

datory disclosure should thus be subject to some mandated degree of accuracy.²²⁸ Therefore, the current safe harbor for forward-looking statements,²²⁹ which insulates issuers from liability for materially misleading mandatory disclosures even if they are made with actual knowledge of falsity,²³⁰ should be abolished.²³¹

This conclusion also lends new insights on the current liability scheme's duty element, which is a prerequisite to liability for a material omission.²³² If a disclosure is mandated, the failure to comply with that mandate should give rise to liability (assuming the other elements of the claim are met), lest the mandate be rendered meaningless. Therefore, the circuit split over whether the MD&A disclosure requirement creates an actionable duty to speak²³³ should be resolved in the affirmative.²³⁴ (Notably, if the MD&A disclosure trigger were adjusted to coincide with the materiality standard, as argued

228. See Edmund W. Kitch, *The Theory and Practice of Securities Regulation*, 61 BROOK. L. REV. 763, 881–82. Professor Kitch argues,

It is impossible to draw a coherent line between that information whose production needs to be encouraged by providing protection from liability and that information whose accuracy needs to be encouraged by imposing an exacting standard of liability. . . . This is a contradiction at the heart of the liability scheme of the securities laws that cannot be obscured by a safe harbor, no matter how complex.

Id. I contend that the only way to solve this contradiction is to mandate disclosure of that information—thus removing the need to incentivize voluntary disclosure by providing a safe harbor—and to impose an appropriately exacting standard of liability to those mandatory disclosures.

229. 5 U.S.C. § 77z-2(c)(2) (2012); *id.* § 78u-5(c)(2)(A).

230. Wendy Gerwick Couture, *Mixed Statements: The Safe Harbor's Rocky Shore*, 39 SEC. REG. L.J. 257, 258 (2011) (explaining that forward-looking statements accompanied by meaningful cautionary language are protected by the safe harbor, even if the statements were made with actual knowledge of their falsity).

231. See John C. Coffee, Jr., *The Future of the Private Securities Litigation Reform Act: Or, Why the Fat Lady Has Not Yet Sung*, 51 BUS. LAW. 975, 989 (1996) (recognizing that the safe harbor, as drafted, suggests that “Congress saw some policy reason to protect knowing falsehoods”).

232. *Basic Inc. v. Levinson*, 485 U.S. 224, 239 n.17 (1988) (“To be actionable, of course, a statement must also be misleading. Silence, absent a duty to disclose, is not misleading under Rule 10b-5.”).

233. Compare *Stratte-McClure v. Morgan Stanley*, 776 F.3d 94, 100 (2d Cir. 2015) (concluding that “failure to make a required Item 303 disclosure in a 10-Q filing is indeed an omission that can serve as the basis for a Section 10(b) securities fraud claim”), with *In re NVIDIA Corp. Sec. Litig.*, 768 F.3d 1046, 1054 (9th Cir. 2014) (holding that a violation of Item 303's disclosure duty is not actionable under Section 10(b) and Rule 10b-5). See also Wendy Gerwick Couture, *Around the World of Securities Fraud in Eighty Motions to Dismiss*, 45 LOY. U. CHI. L.J. 553, 557 (2014) (reviewing eighty district court opinions ruling on motions to dismiss and noting that “the district courts are currently engaged in thoughtful debates about . . . whether Item 303 of Regulation S-K creates a duty to disclose that is actionable as securities fraud”).

234. See Langevoort, *Managing*, *supra* note 51, at 1163 (“The courts’ suggestion that the MD&A does not create a duty to speak for antifraud purposes, as opposed to SEC enforcement, is neither logical nor sensible, and undermines the private action’s role in supplementing the Commission’s enforcement work.”).

above,²³⁵ courts' discomfort with recognizing that Item 303 creates an actionable duty might dissipate.²³⁶) In short, a disclosure mandate without an enforcement mechanism is not a mandate.²³⁷

Finally, I reject the argument that liability standards should be heightened above the optimal degree of accuracy because of the possibility of legal error in favor of liability. For example, Professors Goshen and Parchomovsky—though conceding that a negligence liability standard for misstatements and omissions to the secondary market might be superior to a scienter standard—reject such a modification to the Exchange Act because of their sense that “courts sometimes over-enforce the statutory standard.”²³⁸ I reject this argument for two reasons. First, although error is inevitable,²³⁹ I contend that any response to the potential for error in securities cases should have a theoretical basis and involve an inquiry into the likelihood and costs associated with error. Under the typical articulation of error, false positives are Type I errors, and false negatives are Type II errors.²⁴⁰ As explained by Mark Moller, there are three theories about how to address error: (1) *welfare utilitarianism*, which focuses on minimizing error in the aggregate, without concern about how the error is distributed; (2) *strict egalitarianism*, which seeks to “spread the risk of error evenly among all classes of litigants;” and (3) *liberal egalitarianism*, which “tolerate[s] an unequal distribution of error if doing so provides insurance against error for the least well off.”²⁴¹ After choosing a theoretical basis for addressing error in securities cases, one must calculate the costs and likelihood of each type of error in order to determine whether an adjustment is merited. While Type I errors impose corporate losses, Type II errors erode investor confidence, causing investors to discount the value of the securities market.²⁴² In addition, Professors Goshen and Parchomovsky's contention that Type I errors are more likely in securities cases is questionable. As explained by Stephen M. Bainbridge and G. Mitu Gulati,

235. See *supra* notes 217–218 and accompanying text.

236. Donald C. Langevoort & G. Mitu Gulati, *The Muddled Duty to Disclose Under Rule 10b-5*, 57 VAND. L. REV. 1639, 1651 (2004) (explaining that some courts, by refusing to recognize that Item 303 imposes an actionable duty because the disclosure trigger differs from the materiality standard, are confusing the elements of duty and materiality).

237. *Id.* at 1653 (“[C]ould one possibly justify conceptually a regime in which affirmative misstatements lead immediately to fraud liability but silence never does?”).

238. Goshen & Parchomovsky, *supra* note 29, at 779.

239. See Jason S. Johnston, *Bayesian Fact-Finding and Efficiency: Toward an Economic Theory of Liability Under Uncertainty*, 61 S. CAL. L. REV. 137, 139 (1987) (explaining that “errors are inevitable when the legal fact finder must determine fault from the limited and imperfectly informative evidence presented at trial”).

240. Lynn A. Stout, *Type I Error, Type II Error, and the Private Securities Litigation Reform Act*, 38 ARIZ. L. REV. 711 (1996).

241. Mark Moller, *Procedure's Ambiguity*, 86 IND. L.J. 645, 694–95 (2011).

242. Stout, *supra* note 240, at 712–14.

there are incentives for judges²⁴³ to use substantive law heuristics to summarily dismiss securities claims.²⁴⁴ As such, courts might actually be more inclined to make Type II errors in securities cases.

Second, I contend that any recalibration in response to the potential for Type I and Type II errors should be effectuated—not by adjusting liability standards—but by adjusting procedural rules such as pleading standards and burdens of proof.²⁴⁵ Indeed, one of the key goals of procedural rules is “to manage, and allocate, the risk of error—that is, the risk that deserving plaintiffs fail to recover their losses or innocent defendants pay plaintiffs for losses they did not cause.”²⁴⁶ By contrast, adjusting liability standards to address Type I and Type II rules would undercut the important signaling mechanism of the standards themselves²⁴⁷—to investors about the degree to which they should view disclosures as accurate and to issuers themselves about the degree of care that should be paid when making disclosures.²⁴⁸ Therefore, for both of these reasons, I reject a lowering of the liability standard to take into account the possibility of Type I errors.

2. *Timing of Required Disclosures*

With respect to timing, disclosures should be removed from the hypothetical state of full (or, continuous) disclosure if the marginal social costs of requiring a particular disclosure to be updated constantly exceed the marginal social benefits. This approach is consistent with Professor Franco’s nuanced

243. Stephen M. Bainbridge & G. Mitu Gulati, *How Do Judges Maximize? (The Same Way Everybody Else Does—Boundedly): Rules of Thumb in Securities Fraud Opinions*, 51 EMORY L.J. 83, 100 (2002) (identifying three incentives for judges to use substantive law heuristics: “(1) cognitive and resource constraints; (2) constraints imposed by the norms of judging; and (3) agency problems that arise from using clerks in the writing process”).

244. *Id.* at 119 (identifying ten heuristics used by judges in securities fraud cases that “allow for dismissal on threshold issues”).

245. Amanda M. Rose, *The Multienforcer Approach to Securities Fraud Deterrence: A Critical Analysis*, 158 U. PA. L. REV. 2173, 2192 (2010) (arguing that lawmakers could avoid false positives by imposing “high burdens of proof or demanding pleading standards on enforcers” and avoid “false negatives by . . . adopting low burdens of proof or forgiving pleading standards”).

246. Moller, *supra* note 241, at 694; *see also* Samuel Issacharoff & Geoffrey Miller, *An Information-Forcing Approach to the Motion to Dismiss*, 5 J. LEGAL ANALYSIS 437, 438 (2013) (explaining that “[t]he debate over pleading standards revolves ultimately about the relative frequency and consequences of type 1 versus type 2 error”); Paul Stancil, *Balancing the Pleading Equation*, 61 BAYLOR L. REV. 90, 92 (2009) (explaining that “the risk of wrongful dismissals militates against adoption of a stricter [pleading] standard” while the “the risk of cost arbitrage militates against the adoption of more liberal standards”).

247. *See* Johnston, *supra* note 239, at 180 (arguing in favor of an adjustment to liability standards to take into account error, but recognizing that, if liability standards are used for this purpose, “[t]he law either deceives or, if taken literally, sends the wrong signal entirely”).

248. *See* Wendy Gerwick Couture, *Materiality and a Theory of Legal Circularity*, 17 U. PA. J. BUS. L. 453, 478 (2015) (contending that “[r]easonable investors, when assessing whether a representation is important to their investment decisions, arguably consider whether the speaker would be subject to securities fraud liability if the representation were false”).

proposal to “seek to make disclosure in particular areas more current without necessarily resorting to a continuous disclosure requirement.”²⁴⁹

Applying this methodology largely supports the current timing of disclosure requirements. First, the continuous disclosure requirements should be removed for information that, despite its importance to price accuracy, would be cost-prohibitive to disclose on a continuous basis.²⁵⁰ A quintessential example of information in this category is audited financial statements. Therefore, consistent with the current disclosure regime, disclosure of audited financials should only be required on an annual basis.²⁵¹ Second, the continuous disclosure requirements should not be removed for information that is both highly significant to price accuracy and likely to render prior disclosures stale, even if such disclosures impose some costs. Therefore, the current real-time disclosure requirements—including disclosure about entry into or termination of a material definitive agreement, acquisition or disposition of a significant amount of assets, and a material charge for impairment to an asset²⁵²—are justified.

This methodology also suggests certain discrete adjustments to the current disclosure regime. For example, the risks facing a business are fundamental to price accuracy and are potentially dynamic. At the same time, the marginal collection costs of requiring continuous as opposed to periodic disclosure of risks should not be excessive. As recognized by Professor Langevoort, “[t]hose risks are already (or should be) known to management; management’s primary job is to respond strategically to them.”²⁵³ Although continuous risk disclosure might impose some marginal competitive costs, those would likely be outweighed by the marginal benefits of ongoing risk disclosure. Therefore, the glass-half-empty analysis supports Professor Langevoort’s proposal to mandate ongoing risk disclosure.²⁵⁴

V. PUBLIC COMPANY SANCTIONS FOR MISREPRESENTATIONS

As discussed above,²⁵⁵ the optimal liability standard is part and parcel of the optimal level of disclosure because the degree of accuracy affects both the marginal costs and the marginal benefits of disclosure. Once the optimal liability standard is identified, however, the optimal level of sanctions for violating that liability standard is a separate inquiry. In this Part, I apply the

249. Franco, *supra* note 176, at 301.

250. Langevoort, *Toward*, *supra* note 171, at 771.

251. Oesterle, *supra* note 4, at 224.

252. Form 8-K, SEC. & EXCH. COMM’N, <https://www.sec.gov/about/forms/form8-k.pdf> (last visited Dec. 15, 2016) (containing Items 1.01, 1.02, 2.01, and 2.06).

253. Langevoort, *Toward*, *supra* note 171, at 771–72.

254. *See* Langevoort, *Managing*, *supra* note 51, at 1156.

255. *See supra* text accompanying notes 219–237.

glass-half-empty approach to public company sanctions for misrepresentations and omissions, arguing that the results support a new sanction regime for misrepresentations to the secondary market.

A. Definition of “Full” Sanctions

The hypothetical state of “full” sanctions for violating liability standards is the imposition of sanctions so high as to bankrupt the business. Although this is merely a thought experiment, it is not beyond the realm of possibility. Indeed, in some instances, the current imposition of out-of-pocket damages in open-market securities fraud class actions has the potential to threaten just that.²⁵⁶

B. Methodology to Remove Sanctions

Sanctions should be removed from the hypothetical state of full regulation (or, business viability-threatening sanctions) to the extent that such sanctions would distort issuers’ compliance with the optimal degree of accuracy identified above. The resulting sanctions should incentivize issuers to comply with the above-identified optimal degree of accuracy.²⁵⁷ In order to incentivize an issuer to comply, the amount of sanctions should exceed the issuer’s expected benefits from non-compliance, multiplied by a factor to take into account the likelihood of escaping liability because of non-detection or Type II error.²⁵⁸ The issuer’s expected benefits are two-fold, any direct benefits inuring to the issuer from the misstatement or omission plus the issuer’s saved costs from non-compliance with the optimal degree of accuracy.²⁵⁹ For example, if the issuer would benefit \$100 and save \$50 in collection costs by not complying and would face a fifty percent chance of being held liable for non-compliance, the sanction should exceed \$300. However, the sanction should not exceed this amount by so much as to incentivize over-compliance. If sanctions are excessive, issuers fearing Type I errors might over-comply,²⁶⁰ causing the marginal costs of disclosure to exceed the marginal benefits

256. See John C. Coffee, Jr., *Accountability and Competition in Securities Class Actions: Why “Exit” Works Better Than “Voice”*, 30 CARDOZO L. REV. 407, 432 (2008) (explaining that the hypothetical damages in a securities class action could, if imposed, force the corporation to file for bankruptcy protection).

257. Rose, *supra* note 245, at 2188 (“Determining the scope of the substantive legal prohibition is but one step in constructing a securities fraud deterrence regime. The credible threat of sanctions is the means by which the prohibition influences behavior. Sanction setting itself requires a difficult balancing of under- and overdeterrence costs.”).

258. See Langevoort, *Capping*, *supra* note 226, at 653; Easterbrook & Fischel, *supra* note 219, at 619.

259. See Easterbrook & Fischel, *supra* note 219, at 619.

260. Rose, *supra* note 245, at 2184.

thereof.²⁶¹ The balance between the sanction multiplier (to take into account the likelihood of Type II errors) and the avoidance of excessive sanctions (to take into account the likelihood of Type I errors) depends on how the procedural rules impact the likelihood of each type of error.

Notably, unlike many scholars,²⁶² I am not including as a cost of sanctions the social cost of chilling issuers' voluntary disclosures. For example, Edmund W. Kitch argues, "[s]aying less means litigating less and being held liable less often. Liability is the cost of the activity of making statements, and will reduce the level of that activity."²⁶³ I reject this argument for purposes of calculating the costs of sanctions. On the contrary, under the mandatory disclosure regime crafted above in Part IV, all disclosures whose marginal benefits exceed their marginal costs would be mandated.²⁶⁴ Therefore, even if the imposition of sanctions for affirmative misstatements would chill some voluntary disclosures, the marginal benefits of those disclosures—if they had been made—would not exceed the marginal costs thereof.

Finally, I address the optimal level of sanctions in the aggregate, assuming that the current multi-enforcer approach²⁶⁵ could be calibrated to ensure that an issuer's aggregate sanctions would equate to the optimal level.²⁶⁶

C. *Application of Methodology to Remove Sanctions*

Applying this methodology to the hypothetical state of "full" regulation (in other words, sanctions so high as to bankrupt the business) depends on whether an issuer's failure to comply with the requisite degree of accuracy occurs in the context of offering materials or disclosures to the secondary market. In each context, I will assume that the issuer, by failing to comply with the optimal degree of accuracy, either made unduly positive disclosures or failed to disclose negative information. By necessity, this discussion is

261. Franco, *supra* note 176, at 335–36 ("Concerns about excessive liability costs arise when . . . issuers are required to invest excessively in precautionary measures to avoid liability."); Langevoort, *Capping*, *supra* note 226, at 652 ("More importantly, there are significant costs associated with precaution in the face of excessive liability. Accounting and legal fees are higher.").

262. *E.g.*, Langevoort, *Capping*, *supra* note 226, at 652 (arguing that, "in the face of excessive liability," issuers will "say little or nothing at all when they want to keep secrets for fear of the uncertain consequences of addressing a subject in the first place").

263. Kitch, *supra* note 228, at 840–41.

264. *See* Goshen & Parchomovsky, *supra* note 29, at 776–77 ("Management disclosure decisions are shaped by two competing threats: liability for inaccurate disclosure and liability for non-disclosure.").

265. Langevoort, *Capping*, *supra* note 226, at 652 (explaining that, absent "an optimally staffed" and funded SEC, "private litigation is a necessary supplement to SEC enforcement").

266. *But see* Rose, *supra* note 245, at 2176 (criticizing the multi-enforcer approach because the conditions to promote optimal deterrence are not met).

theoretical as opposed to concrete because so many of the variables are unmeasurable,²⁶⁷ but the analysis nonetheless yields meaningful insights on the appropriate level of sanctions.

In the context of offering materials, sanctions should be removed from the hypothetical state of “full” regulation to a level that incentivizes the issuer to comply with the optimal degree of accuracy without incentivizing over-compliance. The issuer benefits from selling its securities at a price higher than if it had complied. The issuer also benefits from saving the costs associated with ensuring accuracy and completion with the requisite care. In order to incentivize the issuer to comply with the requisite degree of accuracy, the sanction should exceed these benefits, multiplied by the likelihood that the issuer would not be subject to liability for failing to comply.

This methodology largely supports the current private remedy for issuers’ misstatements and omissions in registration statements. Under Section 11 of the Securities Act, issuers are liable for out-of-pocket damages, calculated as the difference between the price paid for the securities and the value once the truth was revealed, reduced to the extent that issuer “proves that any portion or all of such damages represents other than the depreciation in value of such security” resulting from the misstatement or omission.²⁶⁸ In other words, Section 11 imposes damages for the amount by which the offer price was elevated by the misstatement or omission. This over-counts the benefit to an issuer from selling its securities at an unduly high price because the issuer does not recoup the entire selling price of its securities (in light of the payment to the underwriters). However, once the issuer’s saved costs from non-compliance and the multiplier are taken into account, this measure may appropriately incentivize an issuer to comply, without incentivizing the issuer to over-comply.²⁶⁹

Turning to the context of disclosures to the secondary market, sanctions should be removed from the hypothetical state of “full” regulation to a level that incentivizes the issuer to comply with the optimal degree of accuracy, without incentivizing over-compliance. In this context, the issuer’s benefits from non-compliance are less obvious because the issuer does not directly benefit from the inflated market price.²⁷⁰ The issuer may indirectly benefit, however, from “incidental tax benefits, lower costs of capital, protection

267. Langevoort, *Capping*, *supra* note 226, at 657 (“The variables are impossible to measure with precision ex post, much less to predict ex ante on a formulaic basis. If we are to move from aggregate out-of-pocket loss to a deterrence measure, some rough heuristics have to be employed.”).

268. 15 U.S.C. § 77k(e) (2012).

269. *See* Langevoort, *Capping*, *supra* note 226, at 663 (“My sense is that the current Securities Act damages measure is relatively sound. The issuer benefits from the fraud . . .”).

270. Langevoort, *Capping*, *supra* note 226, at 658.

from hostile takeovers, temporary business advantages, and increased publicity.”²⁷¹ Of course, as in the context of offerings, the issuer also benefits from saving the costs associated with ensuring accuracy and completion with the requisite care. In order to incentivize the issuer to comply with the requisite degree of accuracy, the sanction should exceed these benefits, multiplied by the likelihood that the issuer would not be subject to liability for failing to comply.

This methodology suggests that the current private remedy for issuer’s misstatements and omissions in periodic reports is excessive, incentivizing over-compliance.²⁷² Under Section 10(b) of the Exchange Act, issuers are potentially liable for out-of-pocket damages, measured by the difference between the price paid and the true value of the security if it had been unaffected by fraud.²⁷³ Such a damage measure would only make sense if there were a remote chance of liability, meriting a very large multiplier. Indeed, as recognized by Professor Langevoort,

There is little reason to believe that, just by coincidence, the aggregate out-of-pocket measure will be equal to or less than the optimal deterrence measure. Much more likely, it will be excessive in terms of deterrence, leading to overprecaution through muted disclosure or silence as a result of fear of draconian liability.²⁷⁴

Therefore, this methodology supports a revision of the damages measure for misstatements and omissions in periodic reports. Because the calculation of the appropriate level of sanctions would involve a “wildly indeterminate and uneven” attempt to calculate the issuer’s benefit from non-compliance,²⁷⁵ the best option may be to impose a floating damage cap.²⁷⁶

VI. CONCLUSION

My objectives with this Article are two-fold. First, I hope that the glass-half-empty approach, alongside the traditional glass-half-full approach, will become an integral part of future scholarly analysis about the appropriate

271. Elizabeth Chamblee Burch, *Reassessing Damages in Securities Fraud Class Actions*, 66 MD. L. REV. 348, 369–70 (2007).

272. Richard A. Booth, *Index Funds and Securities Fraud Litigation*, 64 S.C. L. REV. 265, 274 (2012) (arguing that, because the damages measure in securities fraud class actions is too large, “defendant companies invest too much in prevention and defense”).

273. Julia Pashin, *The PSLRA Cap on Securities Fraud Damages: An Empirical Evaluation of the 90-Day “Bounce-Back”*, 41 SEC. REG. L.J. 169, 170–71 (2013).

274. Langevoort, *Capping*, *supra* note 226, at 643.

275. *Id.* at 658; *see also* Burch, *supra* note 270, at 369–70 (characterizing the benefits to issuers from non-compliance as “speculative and nearly impossible to value”).

276. Langevoort, *Capping*, *supra* note 226, at 660 (arguing for a floating damage cap that would make “the cap a percentage of some readily measurable figure (e.g., total market capitalization, net assets or gross income of the company in question”).

bounds of securities regulation. Second, I hope that the insights that this approach reveals in the contexts of regulation of offerings, mandatory disclosure by public companies, and public company sanctions for misstatements and omissions will be incorporated into future reforms of securities regulation, leading to a more comprehensive, coherent, and unbiased regulatory scheme that furthers the goal of accuracy in securities pricing.